88-53

Supreme Court, U.S.
FILED
JUL 5 1988
JOSEPH F. SPANIOL, JR.
CLERK

No. ___-___

IN THE

Supreme Court of the United States

October Term, 1987

THE BOEING COMPANY,

Petitioner,

v.

EQUAL EMPLOYMENT OPPORTUNITY COMMISSION,

Respondent.

PETITION FOR WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

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July 5, 1988

ABCD Legal Printers, Seattle, WA

QUESTION PRESENTED

Whether an age limitation, applied to Boeing pilots engaged in flight operations "almost perfectly congruent" with those directly regulated by the Federal Aviation Administration's "age-60" rule, is a "bona fide occupational qualification" ("BFOQ") under the Age Discrimination in Employment Act of 1967 ("ADEA") as a matter of law.

PARTIES TO THE PROCEEDING

The petitioner in this matter is The Boeing Company, a Delaware corporation, which was the defendant in the district court. The respondent is the Equal Employment Opportunity Commission ("EEOC"), which was the plaintiff below.

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EQUAL EMPLOYMENT OPPORTUNITY COMMISSION,

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PETITION FOR WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

OPINIONS BELOW

The United States District Court for the Western District of Washington (Rothstein, J.) entered an order granting Boeing's motion for summary judgment on February 24, 1986 (Appendix B). The district court opinion is reported at 40 FEP Cas. [BNA] 292. Respondent EEOC filed a notice of appeal on April 18, 1986. The Ninth Circuit reversed the district court on April 6, 1988, in an opinion reported at 843 F.2d 1213, 46 FEP Cas. [BNA] 922 (Appendix A).

JURISDICTION OF THIS COURT

Jurisdiction of this Court is based on 28 U.S.C. § 1254(1). The timing of this petition is governed by 28 U.S.C. § 2101(c), providing 90 days from the April 6, 1986 filing of the Ninth Circuit decision.

PERTINENT STATUTES AND REGULATIONS

1. Age Discrimination in Employment Act of 1967, 29 U.S.C. § 623(a), (f).

2. 14 C.F.R. § 121.383(c).

FEDERAL JURISDICTION

Original federal jurisdiction in this case rests on federal question jurisdiction under 28 U.S.C. §§ 1331 and 1343(a)(4).

STATEMENT OF THE CASE

A. Nature of Proceedings and Disposition Below.

EEOC filed suit against Boeing on February 15, 1984, in the United States District Court for the Western District of Washington at Seattle. EEOC alleged that Boeing's policy of removing its pilots from active flight status at age 60 violated the ADEA. Boeing has maintained that its pilot age limitation is a lawful BFOQ because it is based on an identical regulation promulgated by the Federal Aviation Administration and because Boeing flight operations are sufficiently congruent with those directly subject to the FAA "age-60" rule.[1]

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[1] 14 C.F.R. § 121.383(c) (1987) provides that no commercial air carrier

> may use the services of any person as a pilot . . . if that person has reached his 60th birthday. No person may serve as a pilot [in commercial airline] operations . . . if that person has reached his 60th birthday.

Boeing is not a commercial air carrier because its flights do not carry *paying* passengers. As detailed in the courts below and in this petition, however, Boeing conducts extensive flight operations using the same jet airliners as commercial airlines, in the same airspace, air traffic control systems, and airports.

The district court, applying substantive principles established in *Johnson v. Mayor & City Council of Baltimore*, 472 U.S. 353 (1985) (*"Johnson"*), and *Western Airlines, Inc. v. Criswell*, 472 U.S. 400 (1985) (*"Criswell"*), held that the nature, purpose, and basis of the FAA age-60 rule established a BFOQ for occupations congruent with those directly subject to the rule. Applying procedural principles now validated by this Court's decisions in *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 106 S. Ct. 2505 (1986) (*"Liberty Lobby"*), and *Celotex Corp. v. Catrett*, 477 U.S. 317, 106 S. Ct. 2548 (1986) (*"Celotex"*), the district court held that there was almost perfect congruity between the occupations of Boeing and commercial airline pilots. Accordingly, the district court concluded that the FAA age-60 rule established Boeing's identical age limitation as a BFOQ as a matter of law and granted summary judgment for Boeing. The Ninth Circuit reversed, occasioning the present petition.

B. Material Facts.

The material facts of this case comprise two principal categories: 1) the nature of Boeing's flight operations and 2) the purpose, logic, and basis of the FAA's age-60 rule. There is no genuine issue as to any material fact.

1. The Nature of Boeing Flight Operations[2]

The Boeing Company is the largest manufacturer in the western world of large, high-performance, multi-engine commercial jet airliners, specifically the Boeing 707, 727, 737, 747,

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[2] Boeing's flight operations are detailed in the affidavits filed in the district court by Boeing affiants and the charging party pilots. These affidavits are collected in Appendix C.

757, and 767 aircraft. Boeing conducts extensive flight operations to support its design research and the testing, manufacture, sale, delivery, and service of its aircraft.

Boeing's corporate flight operations from 1980 to 1985 included more than 10,000 experimental and production test, flight crew training, sales, demonstration, delivery, and ferry flights, carrying more than 160,000 passengers. In addition to these corporate flight operations, Boeing pilots have flown thousands of scheduled passenger flights for commercial airline customers in the United States (such as Continental and New York Air) and throughout the world (such as Qantas and China Airlines). These customer revenue operations are directly subject to the FAA regulations for commercial air carriers, including the age-60 rule, or to comparable regulations prescribed by foreign civil aviation authorities or the Convention on International Civil Aviation and its Annexes. In performing both corporate and customer flight operations, Boeing pilots frequently fly in the same airspace and air traffic control sectors and take off and land at the same airports as commercial airlines, using identical jet airliners.[3]

The nature — and the risks — of the regular commercial airline operations in which Boeing pilots participate are commonly known. Boeing's corporate flight operations, however,

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[3] Many of Boeing's flights, for example, originate and end at Boeing Field International. Boeing Field ranks among the ten busiest airports in the United States in terms of total flights. Furthermore, it shares the airspace and air traffic control systems with nearby Seattle-Tacoma International, another major metropolitan airport which accommodates many thousands of flights and millions of passengers annually. *See Seattle Post-Intelligencer*, December 31, 1986, at 1, 4 ("More than 11 Million Passengers Use Sea-Tac in 1985; Over 13 million are Expected by the End of 1986"). The safety of all flight operations, including commercial airline operations, in this busy airspace depends in significant part on the skill and fitness of Boeing pilots.

present far greater dangers and demands. Planes may often be at or beyond design limits during experimental testing, where, for instance, test protocols require radical maneuvers (such as power dives, stalls, rolls), hazardous weather operations, or operations with key aircraft systems altered or disabled. Production testing routinely involves such irregular in-flight activity as purposely depressurizing the aircraft or shutting down engines, hydraulic systems, or generators to determine if they will restart in midair. Pilot training flight operations simulate emergencies and practice "touch and go" landings and takeoffs (the riskiest parts of normal flight), and involve inexperienced pilots who frequently have limited English fluency.

2. The Purpose, Logic, and Basis of the FAA Age-60 Rule.[4]

The FAA age-60 rule, which was duly promulgated in 1959 and has since been continuously in effect, provides that no commercial air carrier

> may use the services of any person as a pilot . . . if that person has reached his 60th birthday. No person may serve as a pilot [in commercial airline] operations . . . if that person has reached his 60th birthday.

14 C.F.R. § 121.383(c).

This rule proceeds from the FAA's determinations that 1) the likelihood of unpredictable, sudden incapacity and more subtle psychophysiological performance decrements increases with age, becoming significantly more frequent after age 60, and 2) medical science cannot accurately predict the onset of such disabilities in any individual pilot at a critical time.

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[4] Excerpts from the official public record reflecting FAA's historical and current findings and determinations regarding the age-60 rule are attached in chronological order in Appendix D.

such as during the piloting of an airplane. 24 Fed. Reg. 9767 (1959) (Appendix D, at pp. 150a-54a).

The FAA determined that the reduced margin of safety presented by the age-related risks of incapacity in older pilots was unacceptable when combined with operation of

> the largest, highest-performance aircraft, carrying the greatest number of passengers over the longest non-stop distances, operating into and out of the most congested airports near the largest cities, and traveling in flight in and through traffic lanes with the highest density of air traffic.

Id.

During the 30 years since its promulgation, the FAA, the National Institutes of Health, and Congress have periodically reexamined and always then reaffirmed the age-60 rule. *See, e.g.*, "Disposition of Petition," FAA Reg. Docket No. 10358 (1972) ("[T]here continues to be a sound medical basis for retaining the age-60 rule. When the rule was adopted, a chronological determinant was selected in the absence of our ability to determine the physiological and psychological age of individual pilots, and that ability remains lacking today.") (Appendix D, at p. 155a); "Report of the National Institute on Aging Panel on the Experienced Pilots Study," August 1981 ("NIH Report") (older pilots endanger safety because of age-related declines in health and performance that no existing medical or performance appraisal system can evaluate on an individual basis) (Appendix D, at p. 156a); 49 Fed. Reg. 14,695 (1984) (withdrawal of Advance Notice of Proposed Rulemaking proposing experimental adoption of an "age-62" rule on grounds that "with advancing age, the risks of suffering incapacitating medical events and of adverse psychological, emotional, and physical changes rise," and that the NIH Report confirms "a present inability to distinguish those pilots

who, as a consequence of aging, present a threat to air safety from those who do not") (Appendix D. at pp. 157a-58a).[5]

In October 1985 the FAA again reaffirmed its age-60 rule in hearings before the House Select Committee on Aging, stating that despite scientific advances, "there is still no way to predict, with reliable accuracy, the presence or onset of a number of medical problems in an individual aging pilot or to detect and measure all of the possible declining physical and mental functions." *See* Statements Before House Select Committee on Aging on Age-60 Rule for Pilots, 99th Cong., 1st Sess., October 17, 1985, Comm. Pub. No. 99-533 (Appendix D, at pp. 159a-60a).

Finally, in September 1986, more than six months after the decision of the district court in this action, the FAA denied a petition from 39 airline pilots and former pilots seeking individual exemptions from the age-60 rule, stating:

> Regardless of individual exceptions that may be cited, all available data indicate that the population as a whole is subject to both phenomena: an increasing rate of disability or death due to physical changes or disorders and deterioration in skill performance with increasing age. . . . Additionally, population variability with respect to disability, death and deterioration in performance increases with increasing age. This means that predictive indices suffer from progressive decrease in discriminatory power with advancing age. While our medical diagnostic and performance assessment skills have improved in the past 25 years, diagnostic tests which could be used for

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[5] *See also Age Discrimination Against Airline Pilots: Hearings before the Subcommittee on Health and Long-Term Care of the House Select Committee on Aging*, 96th Cong., 1st Sess. (March 21, 1979); *Hearings Before the Subcommittee on Aviation of the Committee on Public Works and Transportation*, House of Representatives, 96th Cong., 1st Sess. (July 18, 1979).

> screening of airline pilots have not improved to the point where they can be depended upon to detect reliably either the person who will manifest such a deterioration during the several months following examination nor the person who may be unable to perform his crew duties safely, particularly in a novel or critical situation.

Denial of Exemption No. 4848, Reg. Docket No. 25008 (Appendix E, at pp. 186a-87a).

3. Conclusion.

The district court, after an exhaustive review of all the evidence of record, held that for purposes of establishing a BFOQ, the job performed by Boeing pilots is almost perfectly congruent with that performed by airline pilots. The FAA age limitation is based on safety concerns, and the flying done by Boeing pilots raises the same safety concerns as that done by airline pilots. Specifically, Boeing pilots fly large, fast aircraft in crowded airspace. The significant peculiarities of Boeing flights entail even greater demands on a pilot's cognitive and psychomotor abilities than would be experienced in commercial flights. *EEOC v. Boeing Co.*, 40 FEP Cas. [BNA] at 292, 297-98 (W.D. Wash. 1986).

In addition, the district court concluded that the FAA age-60 rule:

> bears important indices of relevance and reliability in that it is based on safety considerations that would support a BFOQ; it is based on extensive evidence; it was promulgated by an expert agency, the FAA, and supported by another, NIA; the FAA weighed the evidence according to standards consistent with ADEA; [and,] the regulation has been reaffirmed on current evidence in the recent past . . .

Id. at 298.

Accordingly, the district court found that the FAA age-60 rule, when "coupled with the background of the regulation and the congruity of the relevant pilot positions, establishes a BFOQ defense for Boeing as a matter of law." *Id.*

REASONS FOR GRANTING THE WRIT

This Court should issue a writ of certiorari on the grounds specified in Rule 17.1(a) and (c). The Ninth Circuit's decision conflicts with significant recent decisions of this Court, seriously departing from the accepted and usual course of judicial proceedings.

First, the Ninth Circuit misapplied this Court's *Johnson* and *Criswell* decisions. By requiring a jury redetermination of underlying issues which had already been resolved by an expert federal agency and merged into federal law, the Ninth Circuit effectively refused to accept the FAA age-60 rule as evidence of a BFOQ. Second, the Ninth Circuit misapplied this Court's *Celotex* and *Liberty Lobby* decisions in determining when summary judgment is to be granted under Civil Rule 56.

Because this case presents the first integrated application of these important principles, this Court's review is necessary to harmonize them. Otherwise, the development of BFOQ and Rule 56 law in the district and circuit courts will be inconsistent and will ultimately produce a greater volume of litigation than is either necessary or desirable.

More significantly, the Ninth Circuit decision creates a direct conflict between two federal regulatory agencies where their authority and agendas intersect. The Ninth Circuit held that the

> critical issue of fact in this case was the detectability on an individual basis of deterioration in a Boeing pilot aged 60 or over that might diminish that pilot's capacity to discharge safely his or her duties. This was an issue for

> the jury to decide if the facts were disputed, or for the court to decide if they were not.

EEOC v. Boeing Co., 843 F.2d 1213, 1211 (9th Cir. 1988).

The FAA, however, has concluded that such individualized medical assessments of pilots are not possible with sufficient reliability, and has embodied that expert determination in federal law which removes airline pilots from their positions at age 60. The Ninth Circuit, at EEOC's urging, has issued a ruling stating that there "is serious doubt that the FAA Rule reflects a determination by FAA that age 60 is a BFOQ as defined by ADEA for the commercial pilots to whom it applies. . . ." *Id.* at 1220. Boeing, and, most likely, the airlines themselves are caught between two federal agencies, one of which concludes that accurate individual testing of pilots over 60 cannot be done, and another which says it must be. This dispute between federal agencies is insoluble without extensive litigation, unless the Ninth Circuit's misapplication of *Johnson* and *Criswell* is corrected by this Court.

A. A Federal Safety Regulation Prescribing Occupational Qualifications May Establish a BFOQ as a Matter of Law for Congruent, Nonregulated, Employment.

1. ADEA Liability Standard and BFOQ Exception.

While ADEA generally prohibits age discrimination in employment, such discrimination is not unlawful

> where age is a bona fide occupational qualification reasonably necessary to the normal operation of the particular business.

29 U.S.C. § 623(f). The BFOQ exception has historically found strong support in the federal courts where safety is a factor. *See, e.g., Hodgson v. Greyhound Lines, Inc.*, 499 F.2d 1122 (7th Cir. 1974), *cert. denied*, 419 U.S. 1122 (1975); *Harriss v. Pan American World Airways*, 649 F.2d 670 (9th Cir. 1980).

The settled formula for a safety BFOQ was first articulated in *Usery v. Tamiami Trail Tours, Inc.*, 531 F.2d 224 (5th Cir. 1976) ("*Tamiami*") (bus line's lawful refusal to hire drivers over age 40). Customized to the present case, this test can be summarized as follows:

> 1) The Boeing age-60 rule must be reasonably necessary to Boeing's flight operations — the greater the safety factor, measured by the likelihood of harm and the probable severity of that harm in case of an accident, the more stringent may be the job qualifications and the more deference must be accorded Boeing's rule; and,
>
> 2) Boeing may rely upon age as a legitimate proxy for safety-related job qualifications if it can show either (a) that it has reasonable cause to believe that all or substantially all pilots over age 60 would be unable to perform the job safely or (b) that it is impossible or highly impractical to assess pilots over age 60 on an individualized basis.

See Tamiami, 531 F.2d at 235-36. This Court approved the *Tamiami* formula in *Criswell*, 472 U.S. at 416-17.

The first stage of the *Tamiami* test is indisputably satisfied. Safety is plainly the essence of Boeing's business and it is reasonably necessary for Boeing to employ pilots posing the lowest possible safety risk. *EEOC v. Boeing Co.*, 40 FEP Cas. [BNA] at 294, 297-98. Thus, only the second stage of the *Tamiami* test is at issue here and turns, as the Ninth Circuit noted, on the critical question of whether it is impossible or highly impractical to assess pilots individually to determine their safety risk. The FAA has, of course, authoritatively determined that airline pilots over age 60 are more likely to suffer a sudden physical or psychophysiological incapacity during flight, and that it is impossible to assess those pilots medically on an individual basis.

Whether the FAA age-60 rule may be relied upon by Boeing depends on whether that regulation is based on considerations that would support a BFOQ under ADEA and whether there is congruity between the regulated and unregulated employments. Where the evidence is materially undisputed, as here, there is no reason in law or logic why Boeing's voluntary adoption of the FAA age-60 rule should not be a BFOQ as a matter of law.

2. Federal Safety Standards May Support a BFOQ Under ADEA.

This Court in *Johnson* and *Criswell* established a logical, efficient protocol for reliance upon a federal safety determination to establish a BFOQ where the federal rule is logically, but not formally, applicable.

In *Johnson* the City of Baltimore relied upon a federal firefighter age-55 retirement rule to support a BFOQ for a city firefighter age limitation. This Court examined the mandatory federal retirement rule and concluded that, because it had been adopted for economic and not safety reasons, it did not embody any federal determination that age is a BFOQ for firefighters. This Court went on to state, however:

> Were there evidence that Congress in fact determined that a class of federal employees must retire early based on the same considerations that support a finding of a BFOQ under [ADEA], the situation might differ. . . . The evidence Congress has considered, and the conclusions it has drawn therefrom, might be admissible as evidence in judicial proceedings to determine the existence of a BFOQ for nonfederal employees.

472 U.S. at 370-71.

Similarly, in *Criswell*, Western Airlines attempted to establish an age-60 BFOQ for flight engineers, based on the FAA

age-60 rule for pilots. This Court, citing *Johnson*, held that while the FAA rule was relevant evidence of a BFOQ, it was not conclusive because there was insufficient congruity in the duties and safety impact between the occupations of flight engineer and pilot. 472 U.S. at 418.

Johnson and *Criswell* thus establish that if the federal determination is "based on the same considerations which support a BFOQ" under ADEA, it is relevant evidence of a BFOQ for nonregulated employees. Neither *Johnson* nor *Criswell* involved facts permitting a complete development of this concept. But the present case, as the district court's analysis demonstrates, provides that vehicle and dramatizes the need for the full development of the *Johnson* and *Criswell* congruity analysis.

3. The District Court Decision.

The district court, following *Johnson* and *Criswell*, held that the FAA age-60 rule would be relevant evidence of a BFOQ for the Boeing age limitation if the FAA rule were "based on the same considerations that support a determination of a BFOQ under ADEA." 40 FEP Cas. [BNA] at 294.

The district court found from the public record, which is summarized and excerpted in this petition and its appendices, that the FAA had reasonably concluded an age-60 rule was necessary to assure public safety. That is, the likelihood of sudden pilot incapacity due to physical or psychological conditions increased with advancing age and became significant after age 60. When these risks combine with the air commerce environment dominated by large, swift jet airliners operating in dense traffic and into and out of congested metropolitan airports, the risks become unacceptably high. Thus, FAA's analysis satisfied the first stage of the *Tamiami* BFOQ test.

The district further found that the FAA's analysis satisfied stage two of the *Tamiami* BFOQ test. The FAA concluded in 1959, and currently maintains, that individualized medical assessments are not sufficiently predictive after age 60 to discard reliance upon age. Not only, therefore, are substantially all pilots over 60 unable to perform safely in a commercial airline environment, it is also impossible or highly impractical to assess individual pilots medically after age 60.

While the foregoing satisfied the *Johnson* and *Criswell* criteria for admitting a federal safety standard as relevant evidence of a BFOQ, the district court further examined the rule's history and rationale to determine whether, or to what extent, it could be *conclusive* in this litigation. This further development of the *Johnson* and *Criswell* formulation considered (1) the extent of the FAA age-60 rule and the amount of evidence on which it was and is based, (2) the expertise of the FAA, (3) whether the FAA's analytical standards were consistent with the ADEA's BFOQ criteria, and (4) how recently the FAA age-60 rule was promulgated or reaffirmed.

The district court concluded (1) that there was a substantial body of evidence reviewed by the FAA in its decisions to adopt and maintain the age-60 rule. The evidence was taken from *Airline Pilots Association International v. Quesada*, 276 F.2d 892, 898 (2d Cir. 1960), *cert. denied*, 366 U.S. 962 (1961), later submissions taken by the FAA in 1972 and 1979, and the 1981 NIH Report, produced at the instance of Congress, which recommended retention of the age-60 rule. Viewing all this evidence together, the district court held that it "would be more than sufficient to establish *prima facie* evidence of a factual basis for a BFOQ." 40 FEP Cas. [BNA] at 296.

The district court then took notice (2) of the FAA's "considerable expertise in matters related to commercial aviation," concluding that the "specialized knowledge and resources" brought to bear on the FAA's age-60 rule would render "efforts

by a court to reexamine the identical issues an unwarranted duplication of expert testimony." The court further noted (3) that the FAA "expressly found that an age limitation was necessary for safety" and had "applied standards — reasonableness and necessity — that are consistent with ADEA standards for establishment of a BFOQ." *Id.* at 296-97.

Finally, the court found that (4) the FAA age-60 rule had been "reaffirmed on current evidence on April 12, 1984 — less than two years ago." This reaffirmation rendered the rule "sufficiently recent to provide reliable evidence of a BFOQ." *Id.* at 297.

Summarizing this analysis, the district court concluded that the FAA age-60 rule bore

> important indices of relevance and reliability in that it is based on safety considerations that would support a BFOQ; it is based on extensive evidence; it was promulgated by an expert agency, the FAA, and supported by another, NIA; the FAA weighed the evidence according to standards consistent with ADEA; the regulation has been reaffirmed on current evidence in the recent past. . . . Because of these indices of relevance and reliability, Boeing is entitled to rely on the conclusions of the FAA. Boeing need not reprove these same conclusions. Moreover, these indices persuade the court that any inquiry by a court into the issues already addressed by the FAA would be redundant and wasteful.

Id. at 298.

4. Assuming Congruity, the FAA Age-60 Rule Is Conclusively a BFOQ for Boeing Pilots.

The FAA age-60 rule represents an historical and current determination by an expert and authoritative federal agency that forecloses in this litigation any factual issue (specifically,

the feasibility of individualized medical assessments of pilots) that has been resolved by (and therefore merged into) the regulation. The district court's examination and analysis of the public record ascertained (1) the extent to which the rule furnishes an unquestionable basis for a BFOQ determination and (2) the issues of material fact that are foreclosed from dispute by EEOC in this litigation.

In other words, because the BFOQ determination is a question of law, EEOC may dispute the point of law whether the FAA age-60 rule is relevant or conclusive evidence of a BFOQ for Boeing pilots,[6] and did so in the district court. But EEOC, lacking the authority, capacity, or expertise of the FAA, may not in this litigation contest an underlying factual determination (the feasibility of individual pilot medical assessments) conclusively and currently resolved by FAA and embodied in federal law. *See Gathercole v. Global Associates, Inc.*, 727 F.2d 1485, 1488 (9th Cir. 1984) (the Department of the Army does not sit as a court of review for FAA). EEOC does not and cannot logically suggest that Boeing can perform medical assessments that FAA has concluded are impossible.

The Ninth Circuit's decision, however, authorizes EEOC to submit to a jury the very expert issues already authorita-

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[6] The original interpretive regulations of the Department of Labor, promulgated contemporaneously with the effective date of ADEA, in fact cited the FAA age-60 rule as an illustration of a BFOQ under ADEA. 33 Fed. Reg. 9172 (1968). The Labor Department interpretation, which was in effect in 1980 when Boeing formally adopted its age-60 rule, was changed by EEOC in 1981, more than 13 years after its promulgation. 46 Fed. Reg. 47,724 (1981). EEOC's rescission of the Labor Department endorsement of the FAA age-60 rule as a BFOQ was not explained in the regulatory record as based on any change in ADEA, any principled consideration of medical or scientific developments, or any consultation or coordination with FAA. In fact, EEOC's action was taken contemporaneously with the issuance of the NIH Report recommending retention of the age-60 rule.

tively settled by FAA, regardless of the level of congruity between the occupations of Boeing and commercial airline pilots. Moreover, the Ninth Circuit's decision absolutely forecloses summary judgment in every case involving reliance on an analogous federal rule to establish a BFOQ. This is contrary to the logic and purpose of *Johnson* and *Criswell*, as well as the rules governing summary judgment as interpreted by this Court in *Celotex* and *Liberty Lobby*.[7] Nothing in *Johnson* or *Criswell* indicates that the evidence embodied by a federal rule is somehow peculiarly disabled so that it can never become dispositive. Where, as here, the record compellingly demonstrates the BFOQ basis of the federal safety standard and the almost perfect congruity of the nonregulated and directly regulated employment, the Ninth Circuit's mandate to resubmit those issues at trial wastes judicial and party resources and promotes inconsistency and uncertainty in federal law.

B. Where the Undisputed Record Establishes Employment Congruity in All Material Respects Between Boeing Pilots and Pilots Directly and Continuously Subject to the FAA Age-60 Rule, This Court's *Celotex* and *Liberty Lobby* Decisions Require Summary Judgment On Boeing's BFOQ Defense.

This Court's decisions in *Celotex* and *Liberty Lobby* were expressly intended to revitalize summary judgment practice under Civil Rule 56:

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[7] Even if the underlying factual issues which precede a judicial determination that a federal safety standard is relevant evidence of a BFOQ were not legally foreclosed by the FAA regulation, summary judgment for Boeing on those factual issues would still have been required by this Court's interpretation of Civil Rule 56 in *Celotex* and *Liberty Lobby*. Where FAA has made a determination based on 30 years of research that individualized medical assessments are not sufficiently reliable, no reasonable juror could return a verdict to the contrary. *See Liberty Lobby*, 106 S.Ct. at 2512.

> Rule 56 must be construed with due regard not only for the rights of persons asserting claims and defenses . . . but also for the rights of persons opposing such claims and defenses to demonstrate in the manner provided by the rule, prior to trial, that the claims and defenses have no factual basis.

Celotex, 106 S. Ct. at 2555. These decisions make clear that to avoid summary judgment, a nonmoving party must produce evidence of a genuine dispute of material fact — one which affects the outcome. *Liberty Lobby*, 106 S. Ct. at 2510. Evidence creates a genuine dispute only where it is sufficient to permit "a reasonable jury [to] return a verdict for the nonmoving party." *Id.* Thus, a judge considering a summary judgment motion must ask "whether reasonable jurors could find by a preponderance of the evidence that the plaintiff is entitled to a verdict." Id. at 2512.

In the present case, the only material factual issue is the congruity, with respect to flight duties and safety risks, between Boeing's flight operations and those of commercial air carriers formally subject to the FAA age-60 rule. The undisputed facts in the record below demonstrate that this congruity is simply overwhelming. The FAA rule for airline pilots is based on a safety concern about the decreased margin for error in the operation of large, fast powerful jets in increasingly crowded air space, airports, and air traffic control systems. *See* 24 Fed. Reg. 5247 (June 27, 1959); 24 Fed. Reg. 9767 (December 5, 1959); 49 Fed. Reg. 14695 (April 12, 1984) (Appendix D at 145a-54a, 157a-58a). Boeing pilots fly exactly the same aircraft as airline pilots, in the same airspace and flight environments, in literally thousands of flights every year. As the district court properly concluded, Boeing flight operations are "almost perfectly congruent" with commercial air carrier operations for BFOQ purposes. 40 FEP Cas. [BNA] at 297.

Contrary to this Court's direction in *Celotex* and *Liberty Lobby*, however, the Ninth Circuit failed to identify the *material* facts and further failed to recognize the absence of any *genuine* dispute as to those facts. While conceding the existence of substantial congruity, the Ninth Circuit concluded erroneously that legally sufficient congruity was lacking in three respects.

First, the court suggested that Boeing pilots flying in flight crew training operations perform "a task that *on its face does not appear* to present as much stress or as grave a safety risk as that associated with carrying the primary responsibility for operating the aircraft as commercial pilots do." 843 F.2d at 1221 (emphasis supplied). This determination is a deduction by the court that is flatly contrary to the undisputed record. Uncontroverted affidavits established that Boeing flight crew training operations pose significant stresses and risks at least equivalent to and arguably greater than those of commercial flight. Boeing's training flights often involve repeated "touch and go" landings and takeoffs, concentrating on the riskiest aspects of normal flight. Boeing affiants presented additional uncontradicted evidence that safety concerns in training flights are compounded by the inexperience and, frequently, the limited English fluency of students. Additionally, in a case of overseas training flights, all these concerns are further magnified by the Boeing pilots' lack of familiarity with the air space and airports used for training. (Appendix C, at pp. 88a-90a).

Second, while the Ninth Circuit stated that airline pilots formally subject to the FAA rule fly planes carrying passengers or property for hire, "most" Boeing pilots carry no passengers. 843 F.2d at 1221. This assertion is both contrary to the record and immaterial. It is undisputed that Boeing pilots in Boeing corporate flight operations carried more than 160,000 passengers on 10,000 flights from 1980 to 1985, *not*

including the thousands of passengers transported in actual commercial flights operated by Boeing pilots for customers. Furthermore, the *Johnson* and *Criswell* congruity analysis does not require that the federal rule be directly applicable, but in fact assumes that it is not. Thus, the number of passengers transported by Boeing pilots and whether they paid for the ride, while relevant to whether the FAA age-60 rule is technically applicable on that flight, is immaterial in every other respect.

Third and finally, the Ninth Circuit states that the "workload" of Boeing's pilots was somehow affected by the percentage of their working hours spent in flight. 843 F.2d at 1221. The Ninth Circuit has not only misunderstood "workload," but also considered an issue outside the litigation. The record discloses that pilot "workload" refers only to the number of tasks the pilot must perform *in the cockpit.*[8] That Boeing pilots may perform duties in addition to actual flying is immaterial, since EEOC's lawsuit challenges Boeing's policy of removing pilots *from flight status* at age 60. The nonflight "desk" duties of pilots are not material facts and any disputes or comparisons regarding these duties are not germane.

The in-flight tasks of Boeing pilots are described in detail by Boeing affiants, who provided entirely uncontroverted

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[8] Pilot "workload" is defined as the number of in-flight tasks a pilot must perform within a given time frame. In a commercial airline flight, workload during takeoffs and landings is high, because many critical tasks must be coordinated during a short time period. Cruising at altitude is, however, a low workload operation because little need be done to keep the plane on course. Boeing's corporate flight operations, in contrast, produce very high workload. Many of these flights are not designed simply to move aircraft from one point to another. Rather, their purpose is to put the aircraft in flight, execute a large number of tasks in a relatively short period of time, and then return the plane to the ground. (Appendix C, at pp. 88a-91a, 97a-98a, 119a-33a).

testimony as to the safety risks and considerations raised by Boeing flights, pilot workload, aircraft types flown, routes, air space and airports occupied, and any other aspects of Boeing flight operations relevant to the congruity issue. (Appendix C, at 82a-98a, 119a-33a, 140a-42a).

In short, the safety risk posed by the operation of Boeing's airplanes is, as the district court found, "almost perfectly congruent" with that arising from commercial air carrier operations. No reasonable jury could have concluded otherwise.[9] As directed by this Court in *Liberty Lobby* and *Celotex*, the district court properly separated the material undisputed facts necessary to rule on Boeing's motion from the immaterial controversies raised by EEOC. The Ninth Circuit's refusal to recognize this same separation violates the logic and spirit of this Court's decisions and should be corrected.[10]

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[9] This is evidenced, for example, by the Ninth Circuit's own decision in *Gathercole v. Global Assoc.*, 727 F.2d 1485 (9th Cir. 1984). In *Gathercole*, the Ninth Circuit reversed a jury determination and held as a matter of law that the FAA age-60 rule created a BFOQ for unregulated pilots. The employer in *Gathercole* was operating an air taxi service in the Marshall Islands, flying small prop aircraft in virtually empty airspace with small numbers of passengers. In contrast, Boeing flies large commercial jetliners in busy commercial airspace, under circumstances vastly more congruent with the commercial flight operations to which the FAA rule formally applies. *See also Rasberg v. Nationwide Life Ins. Co.*, 671 F. Supp. 494 (S.D. Ohio 1987) (granting summary judgment recognizing FAA rule as a BFOQ as a matter of law for corporate pilots); *EEOC v. El Paso Natural Gas Co.*, 626 F. Supp. 182 (W.D. Texas 1985) (FAA rule establishes BFOQ as a matter of law based on congruity of regulated and nonregulated occupations).

[10] The Ninth Circuit's incantation of ADEA's preference for a jury determination exalts ADEA over the fundamental principles articulated in Civil Rule 56 and in this Court's *Celotex* and *Liberty Lobby* decisions. Nothing in ADEA forbids summary judgment in an appropriate case. The Congressional preference for a jury determination in ADEA cases is, of course, intended only to provide jury review of disputed material facts. No such disputes are present in this case.

CONCLUSION

It is unlikely if not inconceivable that the congruity between regulated and unregulated occupations could be greater than in the present case. Boeing flight operations raise safety concerns — operation of large commercial jets in congested airspace — virtually identical to those giving rise to the FAA age-60 rule. The state of the art for medical testing has been determined and redetermined by the FAA, which has concluded that medical science cannot accurately predict sudden incapacity of an airline pilot age 60 or over. Based on these undisputed facts, this Court's decisions in *Johnson* and *Criswell*, as well as in *Celotex* and *Liberty Lobby*, entitle Boeing to summary judgment. If these decisions are to have force, the Ninth Circuit's decision must be overturned. Furthermore, the Ninth Circuit's decision injects into federal decisional law a ruling improperly questioning the BFOQ basis of FAA's rule even for airline pilots, the area of the rule's direct application. The decision thus creates and aggravates a dispute between the FAA and EEOC over the purportedly "controversial" age-60 rule. For all these reasons, Boeing's petition for certiorari should be granted and the Ninth Circuit's decision overturned.

Respectfully submitted.

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FOR PUBLICATION

UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT

EQUAL EMPLOYMENT OPPORTUNITY COMMISSION,	)	No. 86-3754
Plaintiff-Appellant,	)	D.C. No. CV-84-187-R
THE BOEING COMPANY,	)	OPINION
Defendant-Appellee.	)	

Appeal from the
United States District Court
for the Western District of Washington
Barbara J. Rothstein,
District Judge, Presiding

Argued and Submitted
April 6, 1987--Seattle, Washington

Filed April 6, 1988

Before: James R. Browning,
Chief Judge, Eugene A. Wright
and Cynthia Holcomb Hall,
Circuit Judges.

Opinion by Judge Browning

SUMMARY

Employment Discrimination

Appeal from judgment that FAA regulation provided a BFOQ for Boe.ng pilots as a matter of law. Reversed and remanded. The court held that the responsibility for determining the validity of a BFOQ lies with the court.

Appellant EEOC sued under the Age Discrimination in Employment Act (ADEA) challenging appellee Boeing Company's practice of removing pilots from active flight duty at age 60. Boeing admitted discriminating on the basis of age but defended on the ground that being less than 60 is a bona fide occupational qualification (BFOQ) for Boeing pilots. Boeing moved for summary judgment, relying entirely upon the argument that a Federal Aviation Administration (FAA) regulation prohibiting commercial airline pilots from flying after reaching age 60 provided a BFOQ for Boeing pilots

as a matter of law. The district court agreed. In granting summary judgment, the court focused on the relevance and the probativeness of FAA's Age-60 Rule. The district court did not consider an extensive evidentiary showing that disqualifying impairments in persons over 60 can be determined on an individual basis by scientific testing.

[1] The validity of a BFOQ turns upon factual findings. Congress expressly decided that problems involving age discrimination in employment should be resolved on a case-by-case basis. [2] The critical issue of fact here was the detectability on an individual basis of deterioration in a Boeing pilot aged 60 or over that might diminish that pilot's capacity to discharge safely his or her duties. [3] Boeing did not offer independent proof that it was highly impractical to determine by testing

whether particular individuals aged 60 or over possessed traits precluding safe and efficient performance as pilots. [4] The court treated FAA's Rule as if it were an administrative determination of a BFOQ for Boeing pilots entitled to deferential review. [5] Responsibility for determining the validity of a BFOQ lies in the courts. [6] There is serious doubt that the FAA Rule reflects a determination by FAA that age 60 is a BFOQ as defined by ADEA for the commercial pilots to whom it applies, much less a BFOQ for Boeing pilots. FAA's Rule has never been tested against ADEA's requirements for a BFOQ even for commercial pilots. [7] The FAA's Rule is inapplicable to pilots who operate large jet aircraft which may carry passengers. The FAA has rejected recommendations that the Rule be extended to other commercial flight operations. [8]

ADEA requires that a BFOQ be reasonably necessary to the essence of the business. In contrast, the standard underlying FAA's Rule requires the highest possible degree of safety in the public interest and may be more hospitable to discrimination in the interests of safety than ADEA's standard for a BFOQ. [9] The record also falls short of establishing that the tasks performed by the various categories of Boeing pilots have the same characteristics for BFOQ purposes as those performed by the pilots to whom FAA's Rule applies. [10] Boeing's level of proof and analysis is too general to satisfy the purposes of ADEA.

[11] The EEOC moved to amend its complaint to add an allegation that Boeing's age-60 rule results in Boeing's pilots' forced lay-off or retirement, loss of work, compensation and benefits. [12] To the extent the proposed

amendment was intended to clarify the complaint, it is now the law of this case that the EEOC will be permitted to discover and present evidence of the alleged consequences of Boeing's retirement policy as an element of damages under the present pleadings. [13] To the extent the motion alleged the consequences of Boeing's age-60 rule as an independent violation of ADEA, it was not an abuse of discretion to deny it.

COUNSEL

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John F. Aslin, Perkins Coie, Seattle, Washington, Michael C. Hallerud, Seattle, Washington, for the defendant-appellee.

OPINION

BROWNING, Chief Judge:

The Equal Employment Opportunity Commission brought suit under the Age Discrimination in Employment Act of 1976 (ADEA), 29 U.S.C. §§ 621-634, challenging the Boeing Company's practice of removing pilots from active flight duty at age 60. Boeing admitted discriminating on the basis of age but defended on the ground that being less than 60 is a bona fide occupational qualification (BFOQ) for Boeing pilots. Boeing moved for summary judgment, relying entirely upon the argument that a Federal Aviation Administration (FAA) regulation prohibiting commercial airline pilots from flying after reaching age 60 provided a BFOQ for Boeing pilots as a matter of law. The district court agreed. EEOC v. Boeing Co., 40 Fair

Empl. Prac. Cas. (BNA) 292 (W.D. Wash. 1986).

We believe the evidence offered by EEOC raised genuine issues of fact that required trial, particularly in light of Congress's expressed preference for jury determination of factual issues arising under ADEA. We therefore reverse.

I

The district court correctly concluded (id. at 293) that to establish a BFOQ for Boeing pilots, the burden rested upon Boeing to prove by a preponderance of the evidence:

> 1) that the job qualification justifying the discrimination is reasonably necessary to the essence of its business; and
>
> 2) that age is a legitimate proxy for the qualification because (a) it has a "substantial basis for believing that all or nearly all employees over an age lack the qualification," or (the alternative chosen by Boeing) (b) it is impossible or "highly impractical for [it] to insure by individual testing that its em-

> ployees will have the necessary qualifications for the job."

See Western Air Lines v. Criswell, 472 U.S. 400, 416-17, 422-23 (1985); Williams v. Hughes Helicopters, Inc., 806 F.2d 1387, 1391 (1986); 29 C.F.R. § 1625.6(b)(1987).

The district court noted that FAA's Age-60 Rule may be relevant evidence of a BFOQ for Boeing pilots if the regulation is based on the same considerations that would support determination of a BFOQ under ADEA. The court observed that the probative weight of the FAA rule depends upon "the degree to which the job performed by Boeing pilots is congruent to that performed by commercial airline pilots." Id. at 294 (citing Johnson v. Mayor and City Council of Baltimore, 472 U.S. 353, 371 (1985), and Western Air Lines, 472 U.S. at 418).

In granting summary judgment, the court focused on (1) the relevance and (2) the probativeness of FAA's Age-60 Rule. To determine the relevancy of FAA's Age-60 Rule, the court examined the findings by FAA upon which the rule was based: namely, that progressive deterioration occurs with age; that sudden incapacity becomes significantly more frequent after age 60; that the risk of such incapacity could not be gauged adequately except by reference to age; and therefore that the Age-60 Rule was necessary for safety of air carriers. Id. at 294. The district court noted that FAA had reexamined and reaffirmed the Age-60 Rule in 1972 and 1984 on the basis of renewed findings that advanced age may adversely affect pilot safety, and that tests were not yet available that would reliably predict such adverse effects in individual

cases. Id. at 295. The court concluded that "because the FAA regulation is based on considerations that would support a BFOQ, the regulation may establish a BFOQ for jobs similar to that of an airline pilot." Id. Whether the regulation does establish a BFOQ for such jobs, the court said, would depend on the probativeness of the regulation. Id.

In assessing the probativeness of FAA's Age-60 Rule in determining a BFOQ for Boeing pilots, the district court considered the strength of the evidence upon which the Rule was based, the expertise of FAA, the standards applied by FAA in adopting the Age-60 Rule, and how current the FAA regulation was. Id. at 295. The court found that the evidence FAA considered was "more than sufficient to establish prima facie evidence of a factual basis for a BFOQ" (id. at 296);

that the "specialized knowledge and resources" of FAA and the National Institute on Aging (which concurred in FAA's Age-60 Rule) "render[ed] efforts by a court to reexamine the identical issues an unwarranted duplication of expert testimony" (id.); that the standard applied by FAA--that the age limitation be reasonable and necessary for safety--was consistent with the standard required to establish a BFOQ for pilots (id. at 296-97); and that FAA had reaffirmed the rule less than two years earlier. Id. at 297. Finally, the court compared the functions of commercial airline and Boeing pilots and concluded:

> that for purposes of establishing a BFOQ the job performed by Boeing pilots is almost perfectly congruent with that performed by airline pilots. The FAA age limitation is based on safety concerns, and the flying done by Boeing pilots raises the same safety concerns as that done by

> airline pilots. Specifically, Boeing pilots fly large, fast aircraft in crowded air space. The significant peculiarities of Boeing flights entail even greater demands on a pilot's cognitive and psychomotor abilities than he would experience on commercial flights.

Id. at 297-98.

The court concluded that the FAA Rule "is essentially conclusive evidence" that being less than 60 is a BFOQ for Boeing pilots. Id. at 294. The court explained: "[T]he FAA regulation, 14 CFR § 121.383(c), coupled with the background of the regulation and the congruity of the relevant pilot positions, establishes a BFOQ defense for Boeing as a matter of law. . . . Boeing is entitled to rely on the conclusions of the FAA. . . . Boeing need not reprove these same conclusions. . . . [A]ny inquiry by a court into the issues already addressed by the FAA would be redundant and wasteful." Id. at 298.

In sum, the district court read Johnson and Western Air Lines to mean that if the considerations upon which FAA based the Age-60 Rule for commercial airline pilots would also support an age-60 limitation as a BFOQ for Boeing pilots, if the evidence before FAA supporting the Age-60 Rule for commercial airline pilots was substantial, and if the occupations of commercial airline pilots and Boeing pilots were sufficiently alike, the court could treat FAA's Age-60 Rule as conclusive as a matter of law of the existence of an age-60 BFOQ for Boeing pilots. Having found the underlying considerations the same, the evidence before FAA substantial, and the occupations congruent, the district court did not consider the Commission's extensive evidentiary showing that disqualifying impairments in persons over 60 can be determined on an

individual basis by scientific testing. Instead, because FAA's Age 60-Rule met the court's tests for relevancy and probativeness, the court held that Boeing was entitled to summary judgment and "[a]ny issues of facts raised by [the Commission] are not material." 40 FEP at 298. On the same ground, the court denied the Commission's motion for further discovery on several subjects clearly relevant to the merits of Boeing's age-60 Rule as a BFOQ for its pilots.

II

[1] The validity of a BFOQ turns upon factual findings, preferably ones by a jury. It was "Congress' indisputable intent to permit deviations from the mandate of the ADEA only in light of a particularized, factual showing . . ." Johnson, 472 U.S. at 362 (citations

omitted). Congress coupled its preference for individualized examination of proffered justifications for age discrimination with a preference for resolution of such issues by a jury: "Congress expressly decided that problems involving age discrimination in employment should be resolved on a 'case-by-case basis' by proof to a jury." Western Air Lines, 472 U.S. at 422 (citing H.R. Rep. No. 805, 90th Cong., 1st Sess. 7 (1967), reprinted in EEOC, Legislative History of the Age Discrimination in Employment Act 80 (1981)).

[2] The critical issue of fact in this case was the detectability on an individual basis of deterioration in a Boeing pilot aged 60 or over that might diminish that pilot's capacity to discharge safely his or her duties. This was an issue for the jury to decide if

the facts were disputed, or for the court to decide if they were not.

Since the matter was before the district court on Boeing's motion for summary judgment, the court was required to deny the motion unless in view of the whole record--including FAA's Age-60 Rule, the evidence considered by FAA, and the expert opinions and other evidence offered by the Commission--no reasonable jury could have decided that it was practical to test pilots age 60 and over for disabling conditions. Anderson v. Liberty Lobby, Inc., 106 S. Ct. 2505, 2510 (1986).

[3] As we have noted, Boeing did not offer independent proof that it was "highly impractical" to determine by testing whether particular individuals aged 60 or over possessed traits precluding safe and efficient performance as pilots. Instead Boeing relied upon

FAA's Age-60 Rule and the evidence upon which FAA based that rule. This evidence included expert opinions on both sides of the issue of the adequacy of modern testing techniques; the district court made no effort to resolve the conflict. Moreover, the Commission submitted an additional showing of recent expert opinion indicating newly developed scientific techniques permitted accurate prognosis on an individual basis of actual or potential loss of function; the district court did not consider this evidence.

In addition to the opinions of experts, the Commission offered evidence that Boeing did not adopt its age-60 policy until 1980, and prior to that time employed pilots beyond age-60 without incident; that there was no evidence that any Boeing pilot had suffered an incapacitating condition during flight;

that FAA had not chosen to require early retirement of its own pilots or of the many pilots not covered by Part 121 of FAA regulations; that the Navy had adopted but thereafter rescinded an age-60 rule for Navy pilots; that FAA and Boeing and other airlines have developed elaborate testing procedures to detect health problems among pilots on an individualized basis and have relied upon these procedures to recertify pilots grounded for potentially dangerous conditions such as alcoholism or cardiovascular disease.[1]

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[1] Evidence of this kind has been considered relevant to the BFOQ issue in a number of cases. See, e.g., Western Air Lines, 472 U.S. at 404, 407, 423; Iervolino v. Delta Air Lines, Inc., 796 F.2d 1408, 1412, 1417 (11th Cir. 1986); Criswell v. Western Air Lines, 709 F.2d 544, 551-52 (9th Cir. 1983), aff'd 472 U.S. 400 (1985); EEOC v. County of Los Angeles, 706 F.2d 1039, 1043 (9th Cir. 1983); Tuohy v. Ford Motor Co., 675 F.2d 842, 843 (6th Cir. 1982); Case Note, 36 Drake L. Rev. 213, 234 (1986-87).

[4] The district court regarded this evidence as irrelevant because it found the evidence considered by FAA in adopting the Age-60 Rule for commercial pilots "more than sufficient to establish prima facie evidence of a factual basis for a BFOQ," and accordingly granted summary judgment for Boeing. 40 FEP at 296. The Court treated FAA's Age-60 Rule as if it were an administrative determination of a BFOQ for Boeing pilots entitled to deferential review. There are two problems with this approach. First, it vests in FAA control and basic responsibility for resolving factual issues in determining a BFOQ. Secondly, it treats the problem of determining a BFOQ for Boeing pilots as if it were the same as determining a BFOQ for the pilots to whom FAA's Age-60 Rule applies.

A.

[5] The statute vests responsibility for determining the validity of a BFOQ in the courts. In the exercise of that responsibility a court may consider relevant factfinding by Congress or by an executive agency, but the court may not abdicate its factfinding function to either of the other branches. No authority called to our attention justifies deference to an agency determination in the administration of ADEA.[2]

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[2]Individualized case-by-case evaluation of each employee is the underlying principle of administration under ADEA. Western Air Lines, 472 U.S. at 411. Because the BFOQ defense substitutes a blanket rule for individual evaluation, it is "'an extremely narrow exception'" to the statute's general principle. Id. at 412 (quoting Dothard v. Rawlinson, 433 U.S. 321, 334 (1977)). "Under the Act, employers are to evaluate employees between the ages of 40 and 70 on their merits and not their age. In the BFOQ defense, Congress provided a limited exception to this general principle. . . . " Id. at 422. To accord FAA's Age-60 Rule conclusive or presumptive status might lead to the validation of age discrimination beyond the

It is clear from both Johnson and Western Air Lines that FAA's conclusions and the record from which they were drawn are no more than evidence for the court to consider in arriving at a judicial decision as to the merits of Boeing's BFOQ defense.[3]

In view of the disputed questions of material facts relating to the detectability of disqualifying impairments by individual testing, trial was required. As the Eleventh Circuit recently stated,

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narrow confines of the BFOQ exception, particularly in view of the difference in the standards applied under ADEA and the Federal Aviation Act. See infra pp. 16- 17.

[3]In Johnson the Court looked first to whether a statutory provision establishing an age limitation for federal firefighters reflected "a congressional determination that age 55 is a BFOQ within the meaning of the ADEA, . . . or whether Congress established the mandatory retirement age based on an analysis different from that manded by the BFOQ standard." 472 U.S. at 363. It concluded that the provision did not "articulate a BFOQ. . . . " Id. at 370. The Court then discussed the effect a congressional determination that age was a BFOQ for certain

"[c]ases which rely heavily on expert testimony, as is the case here, do not

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federal occupations would have had in use of age as a BFOQ in nonfederal occupations. The Court said, "[i]t might be that congressional findings leading to the conclusion that age is a BFOQ for a certain federal occupation would be of relevance to a judicial inquiry. . . ." Id. at 366 n.10 (emphasis added). This relevance, the Court explained, "derives from a recognition that Congress might already have engaged in the same inquiry that a district court must make, and a district court might find congressionally gathered evidence useful and congressional factfinding persuasive." Id. (emphasis added). The Court continued:

> [I]f Congress expressly extended the BFOQ to nonfederal occupations, that determination would be dispositive. But if it did not, the federal exemption nevertheless might be relevant . . . to a district court engaged in reviewing an employer's BFOQ defense. The evidence Congress has considered, and the conclusions it has drawn therefrom, might be admissible as evidence in judicial proceedings to determine the existence of a BFOQ for nonfederal employees. The extent to which these factors are probative would, of course, vary depending at least on the congruity between the federal and nonfederal occupations at issue. . . . Because in this case the evidence supports no such finding of congressional intent to establish a BFOQ, however, we decline to speculate on the manner in which a different federal rule might affect nonfederal employment.

Id. at 370-71 (emphasis added).

easily lend themselves to summary judgment. Indeed most of the public safety age discrimination cases seem to have been resolved at trial." Childers v. Morgan County Bd. of Educ., 817 F.2d 1556, 1559 (11th Cir. 1987)(per curiam).[4] In Childers, summary judgment

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The opening comment that a Congressionally adopted BFOQ would be "dispositive" refers to a legislative determination reflected in a statute--such a statutory directive would be controlling, of course. But the Court clearly stated that when an age limitation which is not legislatively mandated is offered in support of a BFOQ defense, the evidence received by Congress and the conclusions Congress has drawn are not conclusive in the judicial proceeding, but only admissible as evidence.

In Western Air Lines, the Supreme Court applied the reasoning of Johnson to the questions of the proper use of FAA's Age-60 Rule in resolving a BFOQ defense in an ADEA suit: Although the FAA's rule for pilots, adopted for safety reasons, is relevant evidence in the airline's BFOQ defense, it is not to be accorded conclusive weight." 472 U.S. at 418 (emphasis added).

[4]The Eleventh Circuit cited Iervolino v. Delta Air Lines, Inc., 796 F.2d 1408 (11th Cir. 1986); Usery v. Tamiami Trail Tours, Inc., 531 F.2d 224 (5th Cir. 1976); Maki v. Commissioner of Educ. of State of N.Y., 568 F.Supp. 252 (N.D.N.Y.

was reversed and the issue of feasibility of individualized testing remanded for trial largely because of conflicts in medical opinion testimony. See also Tuohy v. Ford Motor Co., 675 F.2d 842 (6th Cir. 1982); EEOC v. County of Santa Barbara, 666 F.2d 373 (9th Cir. 1982).

Western Air Lines is compelling authority that a trial is necessary. In Western Air Lines, as in this case, the employer relied upon FAA's Age-60 Rule to establish a BFOQ for an occupation other than piloting commercial flights--flight engineers. Western requested an instruction that the jury might rely on

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1983) aff'd mem., 742 F.2d 1437 (2d Cir. 1984). To this list may be added Western Air Lines, 472 U.S. 400; Hahn v. City of Buffalo, 770 F.2d 12 (2d Cir. 1985); Hoefelman v. Conservation Comm'n of Mo., 718 F.2d 281 (8th Cir. 1983); EEOC v. University of Tex. Health Science Center, 710 F.2d 1091 (5th Cir. 1983); EEOC v. County of Los Angeles, 706 F.2d 1039 (9th Cir. 1983); Orzel v. City of Wauwatosa Fire Dept., 697 F.2d 743 (7th Cir. 1983); Tuohy v. Ford Motor Co., 675 F.2d 842 (6th Cir. 1982) (remanded for trial).

FAA's Age-60 Rule for commercial carrier pilots to establish a BFOQ for flight engineers "without considering any other evidence." 472 U.S. at 417. The Supreme Court held that FAA's rule was relevant evidence, but "is not to be accorded conclusive weight." Id. at 418. The Court approved submission to the jury of the evidence of the adequacy of individualized testing, including expert opinion on that subject. Id. at 422.

As the opinion of this circuit in the Western Air Lines case reveals, Western objected to instructions which imposed upon Western the burden of showing it was highly impractical to determine on an individualized basis the ability of a particular flight engineer over 60 to perform the job safely, and that some flight engineers possess traits precluding safe job performance

which cannot be detected other than by age. Criswell v. Western Air Lines, Inc., 709 F.2d 544, 549-50 (9th Cir. 1983). Western argued that "it should not have been required to reconstruct what it calls 'the medical rationale underlying the FAA's Age-60 Rule.'" Id. at 550. We held that the issue was properly submitted to the jury, and that the jury's verdict rejecting the BFOQ defense had substantial evidentiary support, including expert testimony "that present-day diagnostic techniques and the current level of medical knowledge make possible individual determinations" of the capacity of second officers over 60 to perform safely. Id. at 551-52.

The Supreme Court in Western Air Lines forcefully rejected the argument, made again by Boeing in this case, that juries are ill-equipped to resolve

disputes between experts over highly technical medical questions:

> Western argues that . . . medical disputes can never be proved "to a certainty" and . . . juries should not be permitted "to resolve bona fide conflicts among medical experts respecting the adequacy of individualized testing." . . . The jury, however, need not be convinced beyond all doubt that medical testing is impossible, but only that the proposition is true "on a preponderance of the evidence." Moreover, Western's attack on the wisdom of assigning the resolution of complex questions to 12 lay-persons is inconsistent with the structure of the ADEA. Congress expressly decided that problems involving age discrimination in employment should be resolved on a "case-by-case basis" by proof to a jury.

472 U.S. at 422 (citations and footnote omitted).[5]

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[5]The Second Circuit responded in similar terms to the argument that case-by-case determinations will lead to inconsistent results:

> It seems somewhat anomalous for the lawfulness of maximum age limits on police hiring to depend on the particular evidence presented at various court trials throughout

We have considered the cases relied upon by Boeing and find them unpersuasive.

Cases sustaining FAA's Age-60 Rule and FAA's refusal to grant exceptions to it decided no more than that the litigants opposing these actions of the agency had failed to carry their burden of showing FAA acted beyond its rulemaking and regulatory authority, without

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> the country. . . . Nevertheless, the ADEA accords each person between 40 and 70 the right to challenge an adverse employment decision based on age and thereby obligates each employer to defend such challenges in separate actions, despite the application of the same age limit to similar or even identical occupations in different communities. Moreover, Congress has not provided for agency determination of whether a particular age is a BFOQ for a particular occupation. The District Court was therefore obliged to undertake the extensive inquiry it made, and our task is limited to determine whether its findings are clearly erroneous and whether relevant legal standards were correctly applied.

Hahn v. City of Buffalo, 770 F.2d 12, 15-16 (2d Cir. 1985)(citations omitted).

substantial evidence, or in abuse of its discretion.[6] Obviously, rulings favorable to FAA on those issues have little relevance here.[7]

Boeing argues that our decisions in Williams v. Hughes Helicopters, Inc., 806 F.2d 1387 (9th Cir. 1986) and Gathercole v. Global Associates, 727 F.2d 1485 (9th Cir. 1984), "compel affirmance" in this case. Boeing argues that Hughes confirms the district court's position that if substantial evidence supports the safety rationale

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[6]Keating v. Fed. Aviation Admin., 610 F.2d 611, 613 (9th Cir. 1979); Rombaugh v. Fed. Aviation Admin., 594 F.2d 893, 899-900 (2d Cir. 1979); Gray v. Fed. Aviation Admin., 594 F.2d 793, 795 (10th Cir. 1979); Starr v. Fed. Aviation Admin., 589 F.2d 307, 311-14 (7th Cir. 1978); O'Donnell v. Shaffer, 491 F.2d 59, 62-63 (D.C. Cir. 1974); Air Line Pilots Ass'n Int'l v. Quesada, 276 F.2d 892, 898 (2d Cir. 1960).

[7]These cases are distinguished from age discrimination suits under ADEA in Keating, 610 F.2d at 613; Rombaugh, 594 F.2d at 898-99; and Starr, 589 F.2d at 313-14.

of FAA's Age-60 Rule, and there is sufficient congruity between the occupations of commercial airline pilots and Boeing pilots, then the FAA rule establishes a BFOQ for Boeing pilots as a matter of law. This is not the holding of Hughes. In that case a jury found an age limitation imposed by Hughes to be a BFOQ for Hughes helicopter pilots. The pilots' appeal asserted error in the denial of motions for summary judgment by which the pilots had sought to prevent Hughes from relying on FAA's Age-60 Rule and expert testimony developed at trial. The Hughes pilots argued that pilots who were terminated by Hughes were performing safely when they were terminated, that Hughes had no age policy prior to initiating the limitation at issue, that Hughes had not imposed the policy on all of its pilots, and that Hughes had subsequently rescinded

the policy and offered to reinstate pilots terminated under the policy. We sustained the district court's rulings that both FAA's Age-60 Rule and expert testimony were admissible in support of Hughes' BFOQ defense. See Hughes, 806 F.2d at 1389-91. We did not hold FAA's regulations to be conclusive. Id. at 1392. Indeed, we did not hold it to be substantial evidence sufficient to support the jury's verdict that the age limitation was necessary to the essence of Hughes' business--review of that issue was precluded by failure of the Hughes pilots to move for a directed verdict, and we held only that the jury's verdict sustaining the BFOQ defense was not "plain error." Id.

Nor is Gathercole controlling. We held in Gathercole that FAA's Age-60 Rule constituted a BFOQ for pilots employed by an Army contractor to fly

passengers between points in the Marshall Islands on behalf of the Army. The employer in Gathercole was required by its contract with the United States Army to comply with FAA's Age-60 Rule. Boeing is under no such contractual obligation in this case. The two other assumptions relied upon in Gathercole are no long available: (1) we said the Army was entitled to rely on the FAA Rule, Global by its contract was required to do so, and the FAA Rule therefore afforded Global BFOQ protection (Gathercole, 727 F.2d at 1488), but treatment of the FAA Rule as conclusive evidence of a BFOQ defense was subsequently rejected in Western Air Lines, 472 U.S. at 418; (2) we relied on the fact that the regulations interpreting section 4(f)(1) of ADEA listed FAA's Age-60 Rule as illustrative of an appropriate BFOQ, but the Commission sub-

sequently amended its regulations to delete this reference to the FAA Rule to avoid the appearance that it approved the FAA Rule as a BFOQ.

B.

[6] Even accepting the district court's premise that exclusive reliance on FAA's Age-60 Rule in determining a BFOQ might be appropriate if the underlying considerations were the same and the occupations sufficiently similar, the record in this case did not demonstrate the existence of either condition. There is serious doubt that the FAA Rule reflects a determination by FAA that age 60 is a BFOQ as defined by ADEA for the commercial pilots to whom it applies, much less a BFOQ for Boeing pilots. Although FAA's Age-60 Rule has been sustained as a proper exercise by FAA's rule-making and regulatory power, it has never been tested against ADEA's

requirements for a BFOQ even for the commercial pilots. EEOC has referred to FAA's Age-60 Rule as "controversial" and declined to include it as an example of an appropriate BFOQ under ADEA. See 46 Fed. Reg. 47725 (1981); Trans World Airlines, Inc. v. Thurston, 469 U.S. 111, 123 n.17 (1985).

[7] FAA's Age-60 Rule applies only to pilots who fly for air carriers operating under Part 121 (generally airlines operating large passenger-carrying aircraft). 14 C.F.R. §§ 121.1, .38 (1987). It is inapplicable to pilots who operate large jet aircraft which may carry passengers in non-Part 121 operations, such as corporate pilots, flight instructors or pilots who ferry planes, or FAA's own pilots, or to commercial airline pilots who operate smaller aircraft regulated under other parts of FAA's regulations. See 14 CFR § 135.-

243. If FAA's Age-60 Rule were a BFOQ, presumably the safety justification for the Rule would compel its application at least to all commercial airline pilots, and to all pilots operating the types of aircraft covered by Part 121, regardless of which regulation governs the operation. Yet, FAA has rejected recommendations from the National Transportation Safety Board and the National Institute of Health that the Rule be extended to other commercial flight operations. See Report of the National Institute on Aging Panel on Experienced Pilots Study 2 (August 1981).

[8] ADEA requires that a BFOQ be "reasonably necessary to the essence of the business." 29 C.F.R. § 1625.6(b). In contrast, the standard underlying FAA's Age-60 Rule requires "the highest possible degree of safety in the public interest. . . . " 49 U.S.C. § 1421(b)-

(1982), and may be more hospitable to discrimination in the interests of safety than ADEA's standard for a BFOQ. It may be that the Age-60 Rule reflects an FAA decision to resolve any doubts about the necessity for an age qualification in favor of the substantial number of passengers carried by Part 121 carriers. Whatever the reason, it cannot be assumed that the concerns that led FAA to adopt the Age-60 Rule for the particular group of commercial pilots flying aircraft regulated under Part 121 are equally applicable to determining a BFOQ based on age 60 for Boeing pilots.

[9] The record also falls short of establishing that the tasks performed by the various categories of Boeing pilots have the same characteristics for BFOQ purposes as those performed by the pilots to whom FAA's Age-60 Rule applies.

The district court recognized that on "many fine points" there was a conflict in the evidence relating to the similarities and differences, and found only that "the undisputed portions of the evidence [were] sufficient to indicate that in many important respects Boeing pilots perform a job that is similar to the job performed by airline pilots." 40 FEP at 297 (emphasis in original). The evidence was that Boeing's pilots are assigned to a Flight Crew Training Unit (41 pilots), an Engineering Test Flight Unit (10 pilots), or a Production Test Flight Group (14 pilots). Boeing furnished descriptions of the general characteristics of the flying tasks of pilots in each of these units. On the basis of this evidence, the court concluded the jobs of pilots

in all three groups were "almost perfectly congruent" with the job of commercial airline pilots, because both Boeing pilots and commercial pilots fly the same kind of aircraft, fly in the same air space, fly in and out of the same airports, and execute similar maneuvers under conditions that are equally demanding. Id.

[10] This level of proof and analysis is too general to satisfy the purposes of ADEA. It is evident from the broad description of the three job classifications that the tasks performed by Boeing pilots encompass a wide range of physical and psychological demands, and a wide range of risks of harm to the pilots and to others if an accident occurs. Some may perform jobs similar to those of commercial pilots; others rather clearly do not. For example, a

significant portion of the time of pilots in the largest Boeing Unit (the Flight Crew Training Unit) was devoted to training other pilots--a task that on its face does not appear to present as much stress or as grave a safety risk as that associated with carrying the primary responsibility for operating the aircraft as commercial pilots do. Some Boeing pilots perform especially demanding and dangerous experimental and engineering flights; commercial pilots do not. All pilots subject to FAA's Age-60 Rule fly planes carrying passengers or property for hire; some Boeing pilots carry passengers, but most do not. Boeing contended all of its pilots carried heavy workloads; EEOC offered evidence that only a small percentage of the working hours of some Boeing pilots was spent in flying; no evidence was

offered as to the flying hours of commercial airline pilots.

The district court found these differences unimpressive, commenting, for example, that some Boeing pilots few no passengers was of "no great significance." 40 FEP at 298. However, this and other differences between the tasks of commercial pilots and different classifications of Boeing pilots were relevant to the weight of FAA's Age-60 Rule as evidence of a BFOQ for different classifications of Boeing pilots. Among other things, "the greater the safety factor, measured by the likelihood of harm and the probable severity of that harm in case of an accident, the more stringent may be the job qualifications designed to insure safe driving." Usery v. Tamiami Trail Tours, Inc., 531 F.2d 224, 236 (5th Cir. 1976) (quoted with approval in Western Air Lines, 472 U.S.

at 413); see also Tuohy, 675 F.2d at 844-45. The level of safety required in a particular job category is also relevant to the degree of reliability required of testing procedures to detect individual deterioration due to aging.[8]

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[8]Similarly, the district court dismissed the statements of two Boeing pilots that they spent as little as 6.25% and 12.6% of their working hours actually flying an airplane, remarking that flying still "remains the essence of a Boeing pilot's job," as it is of the job of a commercial pilot, because all Boeing pilots are required to fly and qualify for their other tasks largely because of their flying experience. 40 FEP at 298. The court added that Boeing's age-60 rule only required a pilot to leave active flight status at 60, but "not necessarily[] to leave Boeing altogether." Id. Since "this case concerns pilots only as flyers of airplanes[,]" the court said, "the additional tasks Boeing pilots may be required to perform are irrelevant." Id. However, the extent to which Boeing pilots in a particular job category are engaged in flying, both relative to the Boeing pilots in other job categories and relative to commercial pilots, bore upon the stress, risk, and degree of assurance against age deterioration necessary to the essence of Boeing's business, and was significant to the probative value of FAA's regulation.

III

[11] Approximately two months after Boeing filed its motion for summary judgment, the Commission moved to amend its complaint to add an allegation that Boeing's age-60 rule "results in [Boeing's pilots'] forced lay-off or retirement, loss of work, loss of compensation and benefits, and forced participation in defendant's Pilot Terminal Leave or Pilot Early Leave programs." The Commission argued the amendment was necessary to "clarify that the consequences of Boeing's age-60 flight removal policy had always been part of the law suit." The Commission also argued it was necessary to "amplify" its allegations because "[a]s the suit progressed, the commission learned that not only were few Boeing pilots at age 60 offered alternative employment, but that what was offered was temporary."

The district court denied the motion stating that insofar as the amendment was only clarifying, it was unnecessary, and to the extent it "would append to this law suit an entirely new inquiry into layoff and retirement practices at Boeing, the amendment is unduly late."

[12] To the extent the proposed amendment was intended to clarify the complaint, it is now the law of this case that the Commission will be permitted to discover and present evidence of the alleged consequences of Boeing's retirement policy as an element of damages under the present pleadings. To this extent, therefore, denial of the motion did not prejudice the Commission.

[13] To the extent the motion alleged the consequences of Boeing's age-60 rule as an independent violation of ADEA, it was not an abuse of discretion to deny it. "Where the party seeking amendment knows or should know of the

facts upon which the proposed amendment is based but fails to include them in the original complaint, the motion to amend may be denied." Jordan v. County of Los Angeles, 669 F.2d 1311, 1324 (9th Cir. 1982), vacated on other grounds, 459 U.S. 810 (1982).

The Commission's claim that it learned of the consequences of the age-60 rule as actually applied by Boeing only during the pendency of the litigation is not convincing. Before filing suit, the Commission interviewed many Boeing pilots over the course of several years regarding Boeing's retirement practices. Indeed, the complaint as filed included an allegation that Boeing unlawfully forced pilots to retire from all work solely because of age. The Commission amended its complaint at the commencement of discovery to omit this allegation and confine the complaint to

removal of pilots from flight duties. As a result discovery was similarly confined. The district court did not abuse its discretion in finding that Boeing would be prejudiced by the restoration of the new cause of action in these circumstances. See Acri v. International Ass'n of Machinists & Aerospace Workers, 781 F.2d 1393, 1398-99 (9th Cir. 1986) ("late amendments to assert new theories are not reviewed favorably when the facts and the theory have been known to the party seeking amendment since the inception of the cause of action.")[9] The denial of leave to amend is affirmed. The summary judgment is reversed and the cause remanded for further proceedings. REVERSED and REMANDED.

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[9]The district court is free, of course, to reconsider the motion to amend in light of the changed circumstances resulting from this appeal.

APPENDIX B

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
AT SEATTLE

EQUAL EMPLOYMENT OPPORTUNITY COMMISSION,	)	
Plaintiff,	)	NO. C84-187R
v.	)	ORDER GRANTING DEFENDANT'S MOTION FOR SUMMARY JUDGMENT
THE BOEING COMPANY,	)	
Defendant.	)	

THIS MATTER comes before the court on the summary judgment motion of defendant Boeing Company. The court has carefully considered the memoranda and other materials submitted in support of and in opposition to this motion.

The Boeing Company is a large airplane manufacturer that currently employs 65 jet transport pilots on active flight status. A Boeing policy

(hereinafter the "age-60" rule) requires that these pilots leave active flight status upon reaching age 60. A pilot who leaves active flight status must either obtain a non-pilot position at Boeing or leave Boeing altogether.

A Federal Aviation Administration ("FAA") regulation, 14 C.F.R. § 121.383(c) (1985), provides in part:

> No person may serve as a pilot on an airplane engaged in operations under [Part 121] if that person has reached his 60th birthday.

In general, Part 121 regulates commercial airlines. See 14 C.F.R. § 121.1 (1985). Hence, 14 C.F.R. § 121.383(c) applies to commercial airline pilots. Neither this regulation nor any other FAA regulation sets a maximum age for Boeing pilots.

In the present action, the Equal Employment Opportunity Commission ("EEOC") and certain privately

represented pilots challenge Boeing's "age-60" rule as a violation of the Age Discrimination in Employment Act, 29 U.S.C. §§ 621-634 (1982) ("ADEA"). Boeing concedes that the "age-60" rule discriminates on the basis of age. However, Boeing asserts that the rule does not violate ADEA because, under 29 U.S.C. § 623(f)(1), age is a "Bona Fide Occupational Qualification" ("BFOQ") for Boeing pilots. Boeing moves for summary judgment based on the asserted BFOQ.

In order to establish for ADEA purposes that age is a BFOQ for a particular job, an employer must demonstrate that the age limitation he imposes satisfies certain standards first set forth in Usery v. Tamiami Trail Tours, Inc., 531 F.2d 224 (5th Cir. 1976). Stated briefly, these standards are:

> that (1) the age limit is reasonably necessary to the essence of the business, and either (2) that all or substantially all individuals excluded from the job involved are in fact disqualified, or (3) that some of the individuals so excluded possess a disqualifying trait that cannot be ascertained except by reference to age. If the employer's objective in asserting a BFOQ is the goal of public safety, the employer must prove that the challenged practice does indeed effectuate that goal and that there is no acceptable alternative which would better advance it or equally advance it with less discriminatory impact.

29 C.F.R. § 1625.6(b). See Western Air Lines, Inc. v. Criswell, ___ U.S. ___, 105 S.Ct. 2743 (1985) (adopting Tamiami standards). To obtain summary judgment, Boeing must demonstrate that there exist no genuine issues of material fact and that, as a matter of law under the Tamiami standards, age is a BFOQ for Boeing pilots.

Boeing cannot establish a BFOQ by mere reliance on the FAA regulation that

limits the age of airline pilots because this regulation does not apply to Boeing pilots. See Johnson v. Mayor & City Council of Baltimore, ___ U.S. ___, 105 S.Ct. 2717 (1985). However, the FAA regulation may be relevant evidence if the regulation is based on the same considerations that would support determination of a BFOQ under ADEA. See Johnson, ___ U.S. at ___, 105 S. Ct. at 2726-27; Criswell, ___ U.S. at ___, 105 S.Ct. at 2754. The extent to which such evidence is probative depends in part on the degree to which the job performed by Boeing pilots is congruent to that performed by airline pilots. Id. Boeing asserts that the FAA regulation is conclusive. In light of the safety rationale for the FAA regulation and the similarity of the jobs performed by any jet pilot flying into and out of major airports, the court finds that the FAA

regulation is essentially conclusive evidence that age is BFOQ for Boeing pilots.

I. LEGAL REASONING

A. Relevance: Basis of the FAA Regulation

The court concludes that the FAA regulation, 14 C.F.R. § 121.383(c) (1985), is based on considerations that would support determination of a BFOQ under ADEA and that the regulation is therefore relevant evidence in the present case. Under ADEA, a BFOQ for a particular job may be established by evidence that an age limitation is reasonably necessary to assure public safety and that some people excluded by the limitation possess a disqualifying trait that cannot be ascertained except by reference to age. The FAA regulation is based on precisely such evidence.

The regulation now codified at 14 C.F.R. § 121.383(c) was promulgated by the FAA in 1959. This regulation was a response to safety concerns raised by the proliferation of large, fast jet aircraft. The FAA Administrator had appointed a committee to study the possible need for an age limitation for airline pilots, and this committee had recommended that the FAA should promulgate an age limitation of 60 years. A proposed regulation imposing such a limitation was published with an invitation for public comment, and the period for comment was extended beyond the usual 30 days. 24 Fed. Reg. 5247-50 (June 27, 1959). Upon promulgation of the limitation, the FAA stated findings in accordance with those of the committee. 24 Fed. Reg. 9767 (Dec. 5, 1959). Specifically, the FAA found that utilization of airline pilots over age 60 creates a safety hazard.

Id. The asserted reasons for this hazard include:

> . . . that there is a progressive deterioration of certain important psysiological [sic] and psychological functions with age, that significant medical defects attributable to the degenerative process occur at an increasing rate as age increases, and that sudden incapacity due to such medical defects becomes significantly more frequent in any group reaching age 60.

Id. The FAA also found that the risk of sudden incapacity could not be gauged adequately except by reference to a person's age and that other forms of deterioration become more significant in combination with the hidden defects that give rise to the risk of sudden incapacity.

> Such incapacity, due primarily to heart attacks and strokes, cannot be predicted accurately as to any specific individual on the basis of presently available scientific tests and criteria. On the contrary, the evidences of the aging process are so varied in different individuals that it

is not possible to determine accurately with respect to any individual whether the presence or absence of any specific defect in itself either led to or precluded a sudden incapacitating attack. Any attempt to be selective in predicting which individuals are likely to suffer an incapacitating attack would be futile under the circumstances and would not be medically sound . . .

. . .

Other factors, even less susceptible to precise measurement as to their effect but which must be considered in connection with safety in flight, result simply from aging alone and are, with some variations, applicable to all individuals. These relate to loss of ability to perform highly skilled tasks rapidly, to resist fatigue, to maintain physical stamina, to perform effectively in a complex and stressful environment, to apply experience, judgment and reasoning rapidly to new, changing and emergency situations, and to learn new techniques, skills and procedures. The progressive loss of these abilities generally starts well prior to age 60; and, even though they may be significant in themselves prior to age 60, they assume greater significance at the older ages when coupled with medical defects

> leading to increased risk of sudden incapacitation.

Id. Based on these findings, the FAA concluded that a restriction against airline pilots over 60 years old "is necessary for safety in air commerce and is in the public interest." 24 Fed. Reg. at 9768. The validity of the regulation was sustained in Air Line Pilots Ass'n, Internat'l v. Quesada, 276 F.2d 892 (2d Cir. 1960), cert. denied, 366 U.S. 962 (1961).

In 1972, the Air Line Pilots Association International ("ALPA") petitioned the FAA Administrator for a hearing to establish grounds for revocation of the age limitation. "Disposition of Petition," FAA Regulatory Docket No. 10358 (Mar. 23, 1972) at 1 (Boeing Source Materials, Tab 10). The FAA held informal hearings and treated the petition as a petition for rule making to revoke the

age limitation. Id. Upon consideration of the evidence submitted by ALPA and others, the Administrator declined to initiate rule making to revoke the age limitation because the likelihood of certain disqualifying traits still could not be ascertained except by reference to a pilot's age.

> In the opinion of the FAA, there continues to be a sound medical basis for retaining the age 60 rule. When the rule was adopted, a chronological determinant was selected in the absence of our ability to determine the physiological and psychological age of individual pilots, and that ability remains lacking today. . . .

Id. at 5. The refusal to revoke the regulation was upheld in O'Donnell v. Shaffer, 491 F.2d 59 (D.C. Cir. 1974).

In 1979, Congress directed the National Institutes of Health, in consultation with the Secretary of Transportation, to conduct a special study to

determine whether the age limitation for airline pilots is warranted. Pub. L. No. 96-171, 93 Stat. 1285 (1979). The National Institute on Aging ("NIA") arranged the required study and in 1981 a panel of NIA experts reviewed the study and recommended that the existing age limitation be retained but that the FAA should continue to investigate possible relaxation of the age limitation. "Report of the National Institute on Aging Panel on the Experienced Pilots Study" at 1 (Aug. 1981) (Boeing Source Materials, Tab 11). Pursuant to the recommendation of the panel, the FAA issued an advance notice of proposed rule making to investigate possible relaxation of the age limitation and solicited relevant comment. 47 Fed. Reg. 29782 (July 8, 1982). In 1984, the FAA withdrew the advanced notice of proposed rule making and announced that

the age limitation would be retained without change.

> The FAA is convinced that to maintain the highest standards of safety for Part 121 operations, as airlines are required to do, airline pilots should not be permitted to serve past age 60. This is based on the findings made by the FAA in 1959 that were supported by the NIA study and by a number of comments. Those findings are that advanced age does indeed adversely affect the level of safety for Part 121 operations and that currently no medical or performance tests are available which afford a sufficiently reliable basis for predicting or precluding those adverse effects in any individual case.

49 Fed. Reg. 14692 (April 12, 1984).

The court is convinced that, because the FAA regulation is based on considerations that would support a BFOQ, the regulation may establish a BFOQ for jobs similar to that of an airline pilot. Whether the regulation does establish a BFOQ for such jobs depends on various factors addressed in the next section of

this Order. EEOC argues that Johnson, ___ U.S. ___, 105 S.Ct. 2712, precludes adoption of a regulation as a BFOQ for jobs to which the regulation is inapplicable. The court does not read Johnson this way. In the court's view, Johnson merely precludes adoption of a regulation without examination of the reasons for the regulation.

B. Probativeness: Congruity and Other Factors

Even where an age discriminatory regulation is based on considerations that would support a BFOQ and the regulation is therefore relevant to an employer's BFOQ defense in an ADEA lawsuit, the probativeness of such a regulation may depend on numerous factors. The Supreme Court has indicated that one of these factors is the degree of congruity between the job involved in the ADEA lawsuit and the job to which the

discriminatory regulation applies. See Johnson, ___ U.S. at ____, 105 S. Ct. 2726-27; Criswell, ___ U.S. at ___, 105 S.Ct. at 2754. However, the Supreme Court has not had occasion to draft an exhaustive list of significant factors. This court believes that such a list should include not only congruity but also the extent of inquiry and amount of evidence on which the regulation is based; the expertise of the body weighing the evidence; the standards that body applied in reaching its conclusions; and how recently the regulation has been promulgated.

1. Evidence

The record does not contain any of the evidentiary material that the FAA reviewed prior to the 1959 promulgation of the regulation now codified at 14 C.F.R. § 121.383(c). According to the privately represented pilots, these

materials have been "lost" by the FAA and are thus unavailable. According to Air Line Pilots Ass'n Internat'l v. Quesada, 276 F.2d 892, 898 (2d Cir. 1960), cert. denied, 366 U.S. 962 (1961), however, the evidence before the FAA provided "considerable support" for the regulation. In 1958, the FAA Administrator and his medical staff began a study on the aging process. Id. at 895. They took counsel with various experts in aviation medicine and safety and observed the practices of five foreign air lines with respect to mandatory retirement. Id. In response to the proposed regulation to limit the age of pilots, the FAA received about 100 comments and the large majority of these favored the regulation. Id.

Interested parties have had an opportunity to submit relevant evidence at least twice since the regulation was

promulgated: once in 1972, in connection with the hearing obtained by ALPA, and once in 1982, subsequent to release of the NIA report. In addition, the FAA in 1979 commissioned a study on the current medical soundness of the age limitation for airline pilots. Appendix A to Boeing's Memorandum in Support of Motion for Summary Judgment at A-10-11; Pilots' Opposition to Motion for Summary Judgment at 9 n.10. The study was conducted by a committee of experts organized by Dr. James Goddard, former Civil Air Surgeon. Id. It appears that the committee took evidence from representatives of ALPA, NIA, the Air Line Medical Directors Association, the National Transportation Safety Board, and other organizations. The committee concluded that, while sudden pilot incapacitation from heart attack or stroke was probably a less severe problem than originally perceived

in 1959 and the risk of such incapacitation might be subject to fairly accurate determination, age related deterioration in other areas could not be determined on an individual basis with current medical techniques. Id. The committee therefore concluded that the current age limitation should be retained. Id.

The record does contain the basic text of the 1981 NIA report produced in response to Pub. L. No. 96-171, 93 Stat. 1285 (1979). "Report of the National Institute on Aging Panel on the Experienced Pilots Study" (Aug. 1981) (Boeing Source Materials, Tab 11). This report reflects the conclusions of a panel of NIA experts who reviewed a study conducted by the Institute of Medicine of the National Academy of Sciences and received comments from interested parties, including ALPA, EEOC, the Pilots

Rights Association, the Civil Aviation Medical Association, the Aerospace Medical Association, and the Air Transport Association of America. Id. at iii-iv. The Institute of Medicine study provided an objective examination, summary and assessment of existing scientific knowledge relevant to the current age limitation for airline pilots. Id. Upon consideration of the study and the comments thereon, the NIA panel concluded that, while no special medical significance could be attributed to age 60, the current age limitation should be retained. Id. at 1. In support of this conclusion, the panel cited substantial evidence, including the established premise that cognitive and psychomotor performance deteriorate with age; general population statistics indicating that disease, death and disability rates rise increasingly

steeply after age 50; general aviation statistics indicating that pilots' accident rates decline until age 60 and rise thereafter; and the absence of proven methods to test for subtle impairment in the cognitive or psychomotor ability necessary to perform in a complex flight environment. Id. at 2-7, 19-21.

The court believes that the efforts of the FAA and NIA would be more than sufficient to establish prima facie evidence of a factual basis for a BFOQ. Cf. Usery v. Tamiami Trails Tours, Inc., 531 F.2d 224, 237-38 (5th Cir. 1976) (BFOQ based on controverted expert testimony); Hodgson v. Greyhounds Lines, Inc., 499 F.2d 859, 863 (7th Cir. 1974), cert. denied, 419 U.S. 1122 (1975) (defendant must show "rational basis in fact" to believe elimination of maximum

age will increase likelihood of accidents).

2. Expertise

Clearly, the FAA has considerable expertise in matters related to commercial aviation, including operation of aircraft. Moreover, NIA has special medical expertise in matters related to the ag process. The specialized knowledge and resources utilized by the experts in these organizations renders efforts by a court to reexamine the identical issues an unwarranted duplication of expert testimony. Cf. Keating v. Federal Aviation Admin., 610 F.2d 611, 613 (9th Cir. 1979) (deference to FAA expertise).

3. Standards

The FAA Administrator promulgated the age limitation for airline pilots by his statutory authority to prescribe reasonable regulations to govern pilots'

periods of service and to provide for safety in air commerce. See 49 U.S.C. § 1421(a)(5)&(6) (1982). He expressly found that an age limitation was necessary for safety. Thus he applied standards--reasonableness and necessity--that are consistent with ADEA standards for establishment of a BFOQ.

4. Current Validity

The age limitation for airline pilots was last reaffirmed on current evidence on April 12, 1984--less than two years ago. 49 Fed. Reg. 14692 (April 12, 1984). The court considers this reaffirmance sufficiently recent to provide reliable evidence of a BFOQ.

5. Congruity

Plaintiff disputes many fine points about the nature of the job performed by Boeing pilots. After careful examination of the affidavits and other materials submitted by the parties, the court finds

the undisputed portions of the evidence sufficient to indicate that in many important respects Boeing pilots perform a job that is similar to the job performed by airline pilots. Boeing pilots fly the same kinds of aircraft that airline pilots fly. They frequently fly in the same air space and fly into and out of many of the same busy airports. According to FAA figures, Boeing Field is one of the ten busiest airports in the United States. Affidavit of F. Paul Bennett ("Aff. Bennett") at 8. The maneuvers Boeing pilots must execute are at least as difficult as those executed by airline pilots, and the conditions under which Boeing pilots fly are at least as demanding as those experienced by airline pilots.

Boeing flight operations are divided into two functional groups: flight test and flight crew training. Affidavit of

Samuel Lewis Wallick, Jr. ("Aff. Wallick") at 3. The flight test group is subdivided into an engineering group and a production group. Id.

Boeing pilots assigned to the flight crew training group train commercial pilot crews to fly Boeing jets purchased by customer air lines. Aff. Bennett at 2. Boeing's customer training school is the only FAA-certified training facility for airline pilots that is not itself connected to an airline. Id. at 3. The final phase of training is conducted in flight. Id. at 6. In order to develop and test trainee skills, training flights include hazardous maneuvers not routinely performed on commercial flights. Id. at 6-7. On such flights, the Boeing pilot may not be in control of the aircraft, but he rides in the co-pilot seat and monitors the performance of the trainee. Affidavit of Zane A. Griffin at 3.

Boeing pilots assigned to flight crew training may also deliver aircraft to a purchaser and then remain with the purchaser for thirty days or more to assist newly trained pilots or, in some cases, to perform as crew members on scheduled flights carrying passengers. Aff. Bennett at 8-9. In some instances, a customer airline has contracted for Boeing to provide pilots for scheduled flights for a year or more until enough of the airline's own pilots can be trained. Id. at 10.

The engineering test fight group is primarily responsible for conducting experimental flights of Boeing's airplanes. Aff. Wallick at 4. To assure adequate safety margins for normal flight, Boeing must determine the maximum performance characteristics of its airplanes. Id. Engineering test pilots must perform many hazardous maneuvers

that test an airplane's structural limitations. Id. at 4-6. Moreover, these maneuvers must be performed in a variety of inclement weather conditions. Id. at 6-7. The number of tasks performed by a pilot on an experimental test flight--including radical maneuvers, observance of aircraft performance, and frequent communication with testing personnel and air traffic control--is much larger than on a normal commercial flight. Id. at 7. Engineering test pilots may also conduct demonstration flights with numerous passengers aboard. Id. at 8.

Production test pilots are primarily responsible for initial quality control flights of new aircraft. Aff. Wallick at 9. In order to test operation of all aircraft systems, a pilot on a production test flight must perform extraordinary action such as taking the aircraft to

maximum operating speed and altitude, shutting down engines to determine if they will restart properly, turning off hydraulic systems and generators to determine if they will come back online properly, and depressurizing the cabin to determine if oxygen masks will be released properly. Id. at 10. The number of tasks performed by a pilot on a production test flight is much larger than on a normal commercial flight. Id. Production test pilots may also deliver aircraft to customers. Id. Often, passengers ride aboard delivery flights. Id.

Construing all evidence in the light most favorable to plaintiff, the court concludes that for purposes of establishing a BFOQ the job performed by Boeing pilots is almost perfectly congruent with that performed by airline pilots. The FAA age limitation is based on safety

concerns, and the flying done by Boeing pilots raises the same safety concerns as that done by airline pilots. Specifically, Boeing pilots fly large, fast aircraft in crowded air space. The significant peculiarities of Boeing flights entail even greater demands on a pilot's cognitive and psychomotor abilities than he would experience on commercial flights.

The court attaches no great significance to the absence of passengers on most Boeing flights. In any event, the evidence indicates that between 1980 and 1985 Boeing pilots carried over 160,000 passengers on more than 10,000 flights and carried 30 or more passengers on each of more than 600 flights. Affidavit of Carol L. Knutson.

EEOC points out that Boeing pilots may perform many functions other than flying. One former flight crew training

pilot says that over 15 years he spent only 25% of his time actually training pilots and only 25% of that time in flight. Affidavit of Zane A. Griffin at 3. He spent much of his time developing training programs, maintaining and developing flight manuals, and maintaining and developing instruction procedures. Id. at 2. He also provided flight and simulator proficiency checks on Boeing pilots. Id. at 3. Another former Boeing pilot says that flying accounts for only 12.6% of his working hours over 22 years. Affidavit of Robert T. Johnson at 1. He says that he spent a good deal of time working with engineering projects, writing operational procedures, providing technical help to customers and conducting talks for sales or public relations purposes. Id. at 2.

Even though Boeing pilots are required to perform various functions in

addition to flying, the court believes that flying remains the essence of a Boeing pilot's job. All Boeing pilots are required to fly airplanes and may be qualified for other tasks based largely on their flying experience. Moreover, the "age-60" rule merely requires a pilot to leave active flight status and does not necessarily require a pilot to leave Boeing altogether. In other words, this case concerns pilots only as flyers of airplanes. The court therefore concludes that the additional tasks Boeing pilots may be required to perform are irrelevant.

II. CONCLUSION

A motion for summary judgment may be granted only where there exists no genuine issue of material fact and the moving party is entitled to judgment as a matter of law. Fed. R. Civ. P. 56(c). In the present case, the court concludes that Boeing is entitled to summary

judgment based on the undisputed evidence of a BFOQ for Boeing pilots. Any issues of fact raised by plaintiff are not material.

The court believes that the FAA regulation, 14 C.F.R. § 121.383(c , coupled with the background of the regulation and the congruity of the relevant pilot positions, establishes a BFOQ defense for Boeing as a matter of law. The regulation bears important indices of relevance and reliability in that it is based on safety considerations that would support a BFOQ; it is based on extensive evidence; it was promulgated by an expert agency, the FAA, and supported by another, NIA; the FAA weighed the evidence according to standards consistent with ADEA; the regulation has been reaffirmed on current evidence in the recent past; and the job performed by Boeing pilots is congruent to that

performed by pilots subject to the regulation in that the jobs raise the same safety concerns. Because of these indices of relevance and reliability, Boeing is entitled to rely on the conclusions of the FAA. Cf. Gathercole v. Global Assoc., 727 F.2d 1485, 1488 (9th Cir. 1984) (Army may rely on FAA conclusions). Boeing need not re-prove these same conclusions. Moreover, these indices persuade the court that any inquiry by a court into the issues already addressed by the FAA would be redundant and wasteful.

IT IS NOW, THEREFORE, ORDERED as follows:

1. Boeing's motion for summary judgment is GRANTED. This action is dismissed.

2. All other motions pending in this matter are STRICKEN.

The Clerk of the Court is directed to forward copies of this Order to counsel of record.

DATED at Seattle, Washington this 24th day of February, 1986.

/s/
BARBARA J. ROTHSTEIN
UNITED STATES DISTRICT JUDGE

APPENDIX C

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
AT SEATTLE

EQUAL EMPLOYMENT OPPORTUNITY COMMISSION,	)	
Plaintiff,	)	NO. C84-187R
v.	)	AFFIDAVIT OF F. PAUL BENNETT
THE BOEING COMPANY,	)	
Defendant.	)	

STATE OF WASHINGTON)
) ss.
COUNTY OF KING)

F. PAUL BENNETT, being first duly sworn upon oath, deposes and says:

1. I am chief pilot, training crews, for The Boeing Company and have held that position since 1981. Prior to assuming my present job, I worked for Boeing as an experimental test pilot and co-pilot, a senior project pilot on the

747 and a flight crew training pilot. Altogether, I have worked as a pilot for Boeing in one capacity or another since 1964. Regardless of my formal organizational assignment at any given time, I have performed both training and experimental flight duties as needed.

2. I was born October 16, 1931. I attended college from 1949 to 1952, when I joined the Air Force. I served in the Air Force as a fighter pilot from 1952 to 1956, flying F-86 jet interceptors over Korea during the war. After my release from active duty, I continued to fly in the Air National Guard while pursuing a degree in aeronautical engineering at the University of Colorado. I received that degree in 1960 and joined Boeing's engineering staff the same year. Four years later, I was able to transfer into Boeing's flight operations as an experimental

co-pilot. In 1966, I attended and graduated from U.S. Navy Test Pilot School.

3. As chief pilot, training crews I am in charge of all training that Boeing pilots provide for customers whose crews must learn to fly Boeing aircraft. There are currently 41 Boeing pilots on flight status who are employed primarily in flight crew training, a subgroup of the company's Flight Test Organization. Three others not on flight status (two of whom are over 60) are also employed at present in phases of flight crew training not involving actual flight. Pilots from the production test and engineering test subgroups also work in flight crew training as needed. By the same token, pilots from flight crew training engage in a variety of flight assignments other than customer training. They are responsible for a substantial portion (about 10%) of

Boeing's demonstration flights, where Boeing aircraft are taken through their paces for prospective customers on board the flights. Flight crew training pilots also co-pilot production and experimental test flights. They perform aircraft delivery (often with passengers aboard) and "engine inoperable" ferry work, discussed below.

4. Boeing's customer training school is in a unique position. It is the sole FAA-certified training facility for Part 121 pilots which is not itself a Part 121 commercial air carrier. Boeing is the only aircraft manufacturer so certified. Boeing's unique status is a result of the company's pioneer role in the development of large commercial passenger jet aircraft.

When the first Boeing commercial jets were introduced, there simply were no pilots qualified to train purchasers

to fly them other than Boeing pilots who had flown the craft in experimental and developmental flight operations. As more jets were delivered and more distinct models introduced, the training program became increasingly formalized, and a particular group of Boeing pilots had flight crew training as their primary responsibility. Today Boeing's training program continues to be one of the larger commercial training centers for commercial jet pilots in the world.

5. Some of the flight crew training offered to Boeing customers is part of an overall "customer support" package which is included on a fairly standard basis as part of the sale of aircraft. However, the needs of many Boeing customers frequently require far more training and support than is part of the standard package. Separate contracts or

side agreements are developed to accommodate those needs. Boeing also contracts to provide flight crew training not associated with the sale of aircraft.

6. The typical sequence for a trainee flight crew includes training at Boeing's flight training centers in Seattle or at a remote location, followed by varying amounts of continued support and monitoring during the customer's regular line flight operations, wherever located.

7. Boeing pilots are not involved in the first phase of pilot training, which consists of ground school and initial fixed base cockpit training. This first phase is taught entirely by engineers and normally takes twelve training days per crew. The length of this training is often much greater if the trainee pilots are not proficient in English. Because Boeing's customers

include numerous foreign airlines for whose pilots the training must be translated, the material covered in this initial phase may take as much as a month.

8. Boeing's flight crew training pilots are first involved in the training program at the advanced phase of fixed-base cockpit training. Normally the same Boeing pilot works with a trainee crew from that point until Boeing's training and support work with that crew is completed. This continuity is essential so that a trainee crew member's repeated deficiency or error, however subtle, will not be overlooked. Continuity also enhances clarity of communication between instructors and trainee pilots, which may take time to build, particularly with non-English speaking trainees. Obviously, good communication and detection of even

minor performance problems are critical to the eventual safety of passengers whom the pilots will shortly be carrying in revenue operations.

9. Following the advanced fixed-based cockpit training (normally three training days absent language or other barriers), the Boeing instructor pilots take their assigned crews through seven training days of "full-flight" simulator work. The fixed-base simulator does not have motion or visual effects and is used primarily to teach auto-flight operation. This work also familiarizes the trainee pilots with the instrumentation and layout of the appropriate craft. The "full-flight" simulators have sound, motion and visual effects which closely duplicate actual flight conditions. Here Boeing pilots provide intense training while monitoring their trainees for performance deficiencies.

At the end of the simulator phase, the trainee pilots are ready for their aircraft training flights. (A small minority of Boeing's flight crew training, called "Phase 2" simulator training, involves a much more intensive program in the "full-flight" simulator. After successfully completing Phase 2 training, a trainee pilot can go directly to the "initial operating experience" required for full certification in a particular model.)

10. The training and check flights are normally flown in the airplane(s) the customer has purchased from Boeing. These flights are not typical of revenue flights which most crews will eventually pilot. Revenue flying ordinarily is a smooth operation that does not usually make extreme demands on pilot skills. By contrast, training and check flights

are filled with simulated problem situations which exact maximum skills of both the trainees and the Boeing pilots in command of the flights. Emergencies such as "engine failures" are simulated by putting one of the plane's engines in idle rather than actually shutting down the engine. However, the maneuvers required and risk involved are nearly the same as in a "real" emergency. Exercises include "engine failure" during both takeoffs and landings, which even under normal circumstances are the most hazardous phase of a flight. Practice in this phase is augmented by numerous "touch and go" landings in which the plane touches down and takes off again without stopping. Because trainees must learn and demonstrate their ability to perform a number of other tasks as well, the training and check flights are unusually busy flights for

both trainees and instructors. In addition, safety concerns are augmented by the inexperience of the trainee crews and, in many cases, by trainees' lack of fluency in English.

11. Although most simulator and training work takes place in Seattle, the demand for training has often exceeded the capacity of Boeing's facility there. Presently and on a number of past occasions, Boeing has arranged to use "full-flight" simulators at distant sites. For example, Boeing pilots are presently training crews on simulators in England and Australia. When training is conducted at a remote site, frequently training and check flights are also at a distant location depending upon customer convenience. Such flying could take place nearly anywhere in the world. In such instances, the normal

challenges of these flights may be increased by Boeing pilots having to fly in unfamiliar airspace, and take off and land at unfamiliar airports.

12. Training and test flights are normally conducted out of Seattle area airports--SeaTac, Paine Field or, most often, Boeing Field. SeaTac and Boeing Field share common traffic control and traffic patterns. These flights mix with the commercial air traffic over and around the Seattle metropolitan area. Boeing Field, to which commercial flights are frequently diverted from SeaTac in inclement weather, is, according to FAA figures, one of the ten busiest airports in the United States. Obviously, safe operation of Boeing training flights are as important to the safety of other aircraft in the traffic pattern as is the safe operation of commercial flights.

13. After the training and check flights are complete for the pilots of a particular customer, the flight crew training pilot(s) travel to the location of the customer's operations to complete Boeing's support, training and check activity. Often the training pilot will actually "deliver" the aircraft in which he has trained the customer's crew(s). Flight crew training pilots have flown airplanes to destinations worldwide, often into unfamiliar airports. At times the Boeing craft has been the first jet of any kind to land at an airport, thus testing the capability of the airport to accommodate jet flight. Delivery flights also at times carry passengers in varying numbers. Passengers have ranged from pilots and other customer personnel who are returning home after training at Boeing to customer managers and officials, and even

government dignitaries, who wish to be part of the inaugural arrival of a new airplane.

14. After the Boeing craft is delivered, Boeing's flight crew training pilots remain at the customer location for a period of thirty days or more. The exact role of the Boeing pilot(s) at this point varies somewhat according to customer needs. The Boeing pilot normally accompanies his former trainees in actual revenue (or line) flying. This phase of Boeing's activity is referred to as "line assist." The Boeing pilot observes and advises the recently trained pilots in their initial flights with revenue passengers. With larger U.S. carriers, line assist is usually conducted by the Boeing pilot from the "jump seat" rather than in one of the two "front seats" of the plane. However, with smaller U.S. carriers and

virtually all foreign customers (which comprise the greatest number of Boeing's customers), Boeing pilots occupy either the command pilot's or first officer's seat. (When in this role for a U.S. carrier, the Boeing pilot is, of course, subject to all provisions of Part 121, including the age-60 rule.) During the last two years, Boeing pilots have "flown the line" as crew members for numerous airlines. Foreign airlines in that category include Pakistan International, LTS (West Germany), Europeair, Brittania, China Airlines (Taiwan), CAAC (People's Republic of China), Ansett (Australia), Air New Zealand and Qantas. Domestic Part 121 carriers include Mark Air, New York Air, Sun World, Continental and Continental West.

15. After their certification to fly a particular Boeing aircraft model,

customer pilots must complete a prescribed period--normally 25 flight hours--of "initial operating experience" or "IOE" under the supervision of a certified check airman. Historically, most U.S. airlines have used their own certified check airmen to complete the IOE. However, some airlines have recently found it more economical to use Boeing's training pilots for this activity. Under section 121.434 of the Federal Aviation Regulations, the check airman conducting IOE for an airline command pilot is also considered to be in command of the craft, regardless of whether he is located in the first officer's seat or the jump seat. As such, the check airman is subject to all the requirements of Part 121, including the age-60 rule.

16. In some instances, Boeing's customers have contracted for actual

line flying by Boeing pilots until enough of their own pilots can be trained and certified to pilot all scheduled flights. For example, Boeing pilots recently completed nearly a year of such support for Alaska-based Mark Air. To meet Mark Air's needs, I assigned four pilots at a time to the project on a 30-day rotation basis. At least a quarter of Boeing's flight crew training pilots were assigned to the project at one time or another. In the past, Boeing has provided similar support to other customers, occasionally for even longer periods. Boeing pilots flew the line for Olympic Airlines (Greece) for approximately two years and did the same for Iran Air. During the 1970's, nearly every flight crew training pilot served a rotation of line flying for Syrian Airlines, for which we provided line

captains for several years. Until approximately 1981, numerous training pilots did rotations over several years for Libya's airline. Briefer stints were flown for Garuda, an Indonesian airline. In such circumstances, Boeing pilots command or act as first officer for scheduled passenger and cargo flights.

17. Several pilots in Boeing's flight crew training organization also do "engine inoperable" ferrying of aircraft, a service Boeing provides by contract. This "engine inoperable" situation is exacting and hazardous, and presents risks which have not been created artificially. Boeing is called on to "ferry" a plane which has lost an engine from the point where it was incapacitated to a location where it can be repaired. Regular airline pilots are usually unwilling and/or insufficiently

skilled to conduct such flights. Boeing pilots who perform these flights must be ready to undertake the task at a moment's notice, whenever a disabled aircraft situation occurs. They typically fly the disabled planes out of and into regular commercial airports. These are not short, easy flights. They have been on routes such as Mexico City to New York, Denver to Los Angeles and New York to London.

/s/
F. PAUL BENNETT

SUBSCRIBED AND SWORN to before me this 25th day of November, 1985.

/s/
NOTARY PUBLIC in and for the State of Washington, residing at Seattle

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON

EQUAL EMPLOYMENT OPPORTUNITY COMMISSION,	)	
Plaintiff,	)	NO. C84-187R
v.	)	AFFIDAVIT OF ZANE A. GRIFFIN
THE BOEING COMPANY,	)	
Defendant	)	

STATE OF WASHINGTON)
) ss.
COUNTY OF KING)

ZANE A. GRIFFIN, being duly sworn, upon oath deposes and says:

1. I am one of the former Boeing pilots listed on Schedule A of the First Amended Complaint in the EEOC's suit against The Boeing Company.

2. I was hired by Boeing in June, 1966. After working approximately six

months in the flight manual department, I requested and received a transfer to the newly developed flight crew training department.

3. From that time, I worked as an instructor pilot for Boeing until October 1, 1982 when I was placed on Pilots Early Leave pursuant to Boeing's decision to remove all pilots from flight status at age 60.

4. During my 15-year tenure as an instructor pilot, I had the following responsibilities: developing training programs, maintaining and developing flight manuals, maintaining and developing instruction procedures, providing flight and simulator proficiency checks of Boeing pilots, and instruction of customer flight crews.

5. It was not necessary or required to do any flying in order to

develop or maintain training programs, flight manuals or instruction procedures.

6. In performing flight proficiency checks, I did not pilot the airplane, but merely observed the pilot, evaluating his performance. My role was identical to that of an FAA check pilot. FAA pilots are not within the scope of the FAA rule prohibiting commercial airline pilots from flying past age 60.

7. Obviously, simulator checks did not require that I do any flying since the pilot was being evaluated in a simulator.

8. Most of my time as a Boeing pilot was spent working on various stages of the instruction program Boeing offered to its customers' flight crews.

9. After an airplane was purchased, as an instructor pilot, I would

visit the customer's facility, familiarize myself with the routes flown by the airline and determine the particular training needs of that airline. This stage usually took about two weeks.

10. The flight crew to be trained would then attend for one month Boeing's ground school taught by Boeing's engineers. During this time I would prepare a report on my two-week on-site visitation and set up the particularized training for the customer's flight crew.

11. After the crew completes ground school, I would train them for approximately two weeks on the ground in the simulator.

12. The remaining instruction, about four to six hours per pilot and co-pilot, was actual flying. The student pilot flew the plane; I acted as an

observer sitting in the co-pilot seat. Only when the co-pilot was being instructed did I sit in the pilot seat. No passengers were ever on board during an instruction flight.

13. Approximately 25 percent of my time was spent actually instructing flight crews. Seventy-five percent of the total instruction time was spent in a flight simulator; only about 25 percent of the instruction was done in flight.

14. In addition to these stages, the customer had the option of obtaining "line assistance," that is, visitation by an instructor pilot for a period from 2 weeks to 3 months. During this stage, while I would occasionally occupy a seat, there was always a fully operating crew on board and my duties were those

of an observer and safety pilot. Throughout my entire career at Boeing, I only once was required to take over the aircraft during a line assistance flight.

15. In addition to the duties outlined above, instructor pilots could be scheduled to pilot commercial passenger flights. This flying, sometimes called 121 flying, was done to improve customer relations and usually was done for foreign customer airlines. This program was voluntary for the pilots; we were not required to participate. During my 15 years with Boeing I flew 121 about 200 hours or a total of about 25 working days. Aside from the single line assist occurrence, these voluntary assignments were the only times my work as a pilot was within the FAA's age 60

rule or a foreign equivalent of that rule.

/s/
ZANE A. GRIFFIN

SUBSCRIBED AND SWORN TO before me this 13th day of December, 1986.

/s/
NOTARY PUBLIC in and for the State of Washington, residing at Seattle

Honorable Barbara J. Rothstein

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
AT SEATTLE

EQUAL EMPLOYMENT OPPORTUNITY COMMISSION,	)	
Plaintiff,	)	NO. C84-187R
v.	)	DECLARATION OF ROBERT T. JOHNSON
THE BOEING COMPANY,	)	
Defendant.	)	

I, ROBERT T. JOHNSON, depose and state as follows:

1. This Declaration is made in opposition to defendant's Motion for Summary Judgment.

2. I am one of the pilots listed on Schedule A to the Amended Complaint.

3. During my 22 years of service as a pilot with Boeing until my sixtieth birthday on March 8, 1980, I flew 5,263 hours, averaging 233 hours per year. This was approximately 12.6% of my working hours (233 hours ÷ 1840 hours/year). In the remaining 87.4% of my working hours, I performed technical work.

4. During my employment with Boeing, I flew a total of 59.2 hours of "revenue" flying (flying in scheduled air carrier operations), or approximately 1.4% of my total work hours. Whereas an airline pilot's principal duty is to fly aircraft, most of the working hours of Boeing's pilots are spent performing various technical, engineering, training and support functions.

5. Unlike airline pilots, there is much more than flying skills required

of a Boeing pilot. I was required to be able to work with engineering projects and staff, write operational procedures, provide technical help to customers, conduct talks with groups for sales and public relations purposes, and coordinate with the Federal Aviation Administration. On another occasion I served as chairman of the committee that developed the B-747 training program. I also supervised the study and development of the Operations Department for several customers, including establishing their personnel requirements.

6. Not all Boeing pilots fly in customer revenue operations. To my knowledge, pilots James Gannett and Edward Hartz, for example, have not flown in customer revenue operations.

7. The more demanding experimental and engineering flights are required to be performed in uncongested areas,

generally in VFR (visual flight rules) conditions. To my knowledge, Boeing does not conduct complicated flight training maneuvers either at Boeing Field or at Seattle-Tacoma Airport. In fact, Boeing is prohibited from conducting experimental flights over populated areas. Most training flights are conducted out of Moses Lake, Washington. Experimental flights are usually conducted over mountain ranges or oceans.

8. Under Part 121 of the Federal Aviation Regulations, Appendix H, all or virtually all non-routine training and checking maneuvers are performed in a simulator, not in an airplane. Airlines with Appendix H approval assign trainees to their first landings in an airplane with revenue passengers aboard. Such airlines do not require non-normal maneuvers to be performed in the airplane.

9. Attached hereto and marked Exhibit 1 is a true and correct copy of page iii of "FAA Approved Part 121 Boeing Jet Transport Flight Program," dated January 15, 1982.

10. To my knowledge, Boeing does not comply with 14 C.F.R. §121.391 in that it does not provide flight attendants on its flights in which persons are transported other than the operating cockpit crew. During my employment, Boeing did not comply with 14 C.F.R. §121.440, requiring that all pilots in command receive a line (enroute) check at least annually. Boeing does not always comply with 14 C.F.R. §§121.433 and 121.434, requiring that pilots second in command be qualified and current in the particular aircraft type. Boeing does not comply with 14 C.F.R. §121.441, requiring that each of its pilots in command on engineering, experimental,

production, demonstration, ferry, and delivery flights receive at least one proficiency check annually, and an additional proficiency check or proficiency training six months thereafter.

11. Experience, training, and pilot technique, rather than age, are the primary factors in conducting experimental, engineering, production, and training flights. Boeing's training incidents have usually involved younger, less experienced instructor pilots. Those instructor pilots removed from flight status at age 60 and then forced to retire represent the safest group of pilots Boeing has ever employed.

I declare under penalty of perjury that the foregoing is true and correct.

/s/

Executed on December 12, 1985.

Judge Barbara J. Rothstein

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
AT SEATTLE

EQUAL EMPLOYMENT OPPORTUNITY COMMISSION,	)	
Plaintiff,	)	NO. C 84-187R
v.	)	ERRATA TO DECLARATION OF ROBERT T. JOHNSON
THE BOEING COMPANY,	)	
Defendant.	)	

Robert T. Johnson, by his attorneys, states that a typographical error has been discovered in his Declaration executed December 12, 1985 and filed December 16, 1985 with Pilots' Opposition to Motion for Summary Judgment. The words "59.2 hours" on page 2, line 2, should read "592 hours."

Date: December 26, 1985

/s/
Attorney for Robert T. Johnson
HALEY, BADER & POTTS
11 South LaSalle Street, #1600
Chicago, Illinois 60603

Mary Anne Vance
604 Interurban Building
157 Yesler Way
Seattle, Washington 98104

CERTIFICATE OF SERVICE

I, Alan M. Serwer, counsel for pilots in the above action, certify that I have served copies of the fore- going Errata to Declaration of Robert T. Johnson, by first class mail, postage prepaid, this 26th day of December, 1985, upon the following:

John F. Aslin, Esq.
Nancy Williams, Esq.
PERKINS COIE
1900 Washington Building
Seattle, WA 98101

EQUAL EMPLOYMENT OPPORTUNITY
COMMISSION
Seattle District Office
1321 Second Ave., 7th Floor
Seattle, WA 98101

I declare under penalty of perjury that the foregoing is true and correct.

/s/
Alan M. Serwer

Honorable Barbara J. Rothstein

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
AT SEATTLE

EQUAL EMPLOYMENT OPPORTUNITY COMMISSION,	)	
Plaintiff,	)	NO. C84-187R
v.	)	AFFIDAVIT OF SAMUEL LEWIS WALLICK, JR.
THE BOEING COMPANY,	)	
Defendant.	)	

STATE OF WASHINGTON)
) ss.
COUNTY OF KING)

SAMUEL LEWIS WALLICK, JR. being first duly sworn on oath, deposes and says:

1. I am currently employed by The Boeing Company ("Boeing") as Director of Flight Test. My job is to supervise the operations of Boeing's flight crew

training, experimental, and production test flight groups.

2. I was born in 1924 and began my flying experience in 1943 at age 19. My initial pilot training was provided in the Navy, where I served as a pilot of carrier-based fighter airplanes..

3. After the war, I attended Kansas State University in Manhattan, Kansas. I received my Bachelor's Degree in mechanical engineering in 1949 and in that same year went to work for Beech Aircraft Company in Wichita, Kansas. In January 1951, I took a job with the Boeing Airplane Company's Wichita operation. My first job for Boeing was writing field service manuals for various Boeing aircraft. By June 1951, I had moved into Boeing's flight test organization as a flight test engineer. In September 1951 I became a Boeing test pilot.

4. During my first few years at a Boeing pilot, my primary job was test flying the Boeing B-47, the predecessor of the Boeing B-52. In 1953, I attended Air Force test pilot school at Edwards Air Force Base in California. In May 1955, I was transferred to Seattle to work in the B-52 program.

5. After arriving in Seattle in 1955, I flew test flights of the B-52 and the Boeing Dash 80. The Dash 80 was the prototype for the Boeing 707 and the KC-135 military transport. In 1956 I began test flying the KC-135; in 1958 I began test flights of the Boeing 707.

6. By the early 1960's, I was test flying only jets designed for the commercial air transport market. I was the project test pilot and lead test pilot for the Boeing 727 during this period. I was the pilot for the first 727 flight, which occurred in 1963.

7. In the mid to late 1960's, I performed extensive test flying of the Boeing 737, the stretch version of the 727 (the 727-200), and the Boeing 747. I was the co-pilot on the 737's first test flight in 1967. During the 1960's I also flew demonstration flights for customers of the 727, 707, and 737.

8. In 1970, I became Boeing's Chief Test Pilot and was responsible for supervising all the experimental test pilots. I held this position until 1974, when I assumed my current job as Director of Flight Test.

9. In the late 1970's and early 1980's, I flew on the first test flights of Boeing's newest jets, the 757 and 767. I also did extensive demonstration flying of these airplanes. In 1984, upon reaching my sixtieth birthday, I left active flight status in accordance with Boeing policy.

10. In my current position, I oversee all of Boeing's flight operations. These operations are divided into two basic functional groups--flight test and flight crew training. Flight test is further subdivided into an engineering group and a production group.

11. The engineering test flight group is primarily responsible for conducting experimental flights of Boeing airplanes. These flights are done to determine airplane performance characteristics both for purposes of FAA certification and simply to determine whether the plane will fly and perform properly. There are currently 10 experimental test pilots.

12. To make sure there are adequate safety margins for normal airplane flight, Boeing must determine the maximum performance characteristics of its airplanes. This is done through flight

testing by engineering pilots. For example, to determine the minimum take-off speed for an airplane, engineering pilots perform takeoffs at reduced power but with a maximum assent angle. This means taking off on the edge of a stall with the tail dragging on the runway. The risk of this procedure, aside from the abnormal contact between part of the plane and the ground, is that the airplane may stall close to the ground after lift-off.

13. Airplane engines must also be tested to determine whether they will function with extreme or abnormal air intake angles. To create these angles in flight, planes must be put into radical side slip or accelerated stall maneuvers.

14. Strength margins of aircraft components are tested by flying airplanes beyond their "red line" speed.

This speed, which airlines flying the plane are never supposed to exceed, is usually approximately .9 of the speed of sound. During "flutter" tests the planes are taken to .95 the speed of sound in steep power dives; sharp control inputs are made to check the damping of airplane controls at those abnormal speeds. This is done to make sure that the controls continue to function beyond the design speeds of the aircraft. Maneuvering and structural capabilities are also tested during these operations. Additionally, stress, strain and loads on airplanes are tested by placing various instruments on the aircraft then observing their readings during radical flight maneuvers.

15. Other flight maneuvers may also be attempted to determined performance characteristics of airplanes. For

example, engineering pilots may put Boeing jets into full stalls--taking the plane beyond the point of maximum lift so that it simply falls into a dive. These types of maneuvers are unique to flight test--no commercial airline pilot would ever purposely put a large jet into a full stall. Most airline pilots would never even experience such a stall except in a small plane for instruction purposes.

16. Experimental flight also involves testing of various types of aircraft systems and their effect on operation. For example, planes may be flown with their hydraulics or control systems partially disabled. Tests may also include heavy gross weight takeoffs during which an engine is shut down. Similarly, approaches or landings with an engine out may be attempted.

17. Other similar tests involve intentional disabling of aircraft systems near the ground. For example, engineering pilots may make a landing approach on autopilot, then purposely introduce a radical maneuver such as a "nose pitch down" or a full-over roll to see whether the autopilot properly disconnects and returns the plane to manual control in time to avoid a crash.

18. On "photo" flights, conducted to take in-flight photographs of Boeing jets, engineering pilots fly Boeing planes in tight formation. This is a highly skilled demanding maneuver. Commercial pilots would never fly large jets this close together except by accident. Similar formation flying occurs during in-flight refueling tests of aircraft, such as the 747. Again, large jets are flown very close together in these maneuvers and their position in

the air must be constantly monitored on a second-to-second basis.

19. Other engineering flights involve testing plane performance under bad environmental conditions. For example, to test aircraft performance under heavy icing conditions, engineering pilots fly Boeing jets in bad weather with the anti-icing system turned off. This allows ice to build up on the wings. Aircraft performance under these conditions can then be measured. Test pilots can also determine whether the anti-icing system will subsequently remove ice from the wings by turning the system back on. This often causes ice to fall off the wings in chunks, sometime damaging engines in flight if the ice chunks are sucked into the air intake. Similar tests involve takeoffs and landings in heavy crosswinds or on wet or icy runways to determine airplane

performance characteristics under adverse conditions.

20. Because of the need to test in a wide variety of environmental conditions, Boeing engineering pilots fly in places as diverse as Bogota, Colombia, Nome, Alaska, La Paz, Bolivia, Puerto Rico, Honolulu and many other locations. Most engineering flights, however, are conducted in Washington, with takeoffs and landings typically in the Seattle area. These flights occupy the same airspace and air traffic control systems as commercial airline flights.

21. Overall, engineering test flight imposes a very high workload on pilots. Many tasks are being performed during the flight. Not only must the pilots take off, maneuver, and land the plane, they must also observe many performance characteristics during flight, communicate with testing personnel,

perform whatever radical or unusual test operations that are required, and still maintain normal ground communications to air traffic control systems. This results in a workload many times higher than commercial flight.

22. In addition to experimental test flight, Boeing's engineering pilots also perform demonstration flying. These flights are conducted to demonstrate aircraft to potential customers are government agencies. Many demonstration flights occur in Seattle but many also occur during worldwide sales tours. During these tours, engineering pilots carry hundreds, sometimes thousands of passengers, including foreign heads of state or other government officials. These flights occur all over the world and often involve takeoffs or landings from unimproved airports with

minimal navigation aids. Airlines interested in purchasing Boeing planes often want to determine whether the planes can operate out of particular airports they must serve. Therefore, Boeing pilots must often land planes at unfamiliar, short air strips with difficult approaches. On occasion, these are airports where no jet has ever landed before.

23. Recent demonstration flights include a 737-300 tour of Brazil in the summer of 1985. During this tour, Boeing engineering pilots performed repeated takeoffs and landings, sometimes at airports not designed for jets, and many times flying with the aircraft full of passengers. During similar 757 and 767 demonstration tours, Boeing engineering pilots carried thousands of passengers into and out of airports all over the world. Boeing engineering

pilots also flew the first nonstop flight from New York to Tokyo in a commercial jet during the demonstration tours of the Boeing 747.

24. Engineering pilots have also flown unusual aircraft. For example, they were the first to fly the space shuttle carrier, a modified 747, and the AWACS, a modified 707. Additionally, they have flown airplanes with odd engine configurations, such as the test 707 with a 727 engine mounted on one side of the rear fuselage, or the "mixed engine" Dash 80, which had different types of engines mounted under the wings for a test flight.

25. Finally, engineering test pilots perform flight duties shared with the production and flight crew training organizations. For example, they perform ferry flying of aircraft, including both delivery flights and "engine out"

ferry flights where a plane with a disabled engine is transported to a repair facility for a customer. Similarly, engineering pilots do flight crew training work, production test flying, and "line" flying for customers.

26. Production test pilots (currently 14) are primarily responsible for initial quality control flights of new aircraft. Each aircraft coming off the line has never been flown before. Production pilots fly the plane for a thorough and complete check of all aircraft systems.

27. Production test flight involves taking aircraft to their maximum operating speed and altitude, shutting down engines to determine if they will restart properly, turning off hydraulic systems and generators to determine whether they will come back online

properly, operating all autopilot, radio, control and other systems.

28. During production flights, cabin pressure is also dropped to the point where oxygen masks are supposed to be released to determine whether these systems function properly. This means the crew routinely undergoes relatively rapid depressurization of a type commercial pilots would only experience during an emergency.

29. Like engineering flight, production test flight is a concentrated high-workload operation. Pilots must perform all their checklist operations at the same time they are flying in the aircraft, and maintaining communication both with engineering personnel and ground air traffic control. Furthermore, because production test flight requires constantly changing speed, altitude and heading, extensive ground

control communication must occur to obtain flight clearances. During take-offs and landings, where workload is routinely high even in a commercial flight, production test flight imposes a workload roughly twice as high, because of the need to observe performance characteristics and communicate with test personnel while also flying the plane. During climb, cruise and descent, where workload is typically low in a commercial flight, production test flight imposes a workload many times greater.

30. Production test flights are also used to gather engineering data. Engineering tests are a part of roughly 80% of all production test flights.

31. Production test flights, like engineering flights, begin and end in the Seattle area, and fly over Washington, Oregon and Idaho in the same air-

space and air traffic control systems as commercial airline flights.

32. Like engineering pilots, production test pilots perform many other types of flying. They typically fly one of the planes during photo-flight sessions which, as discussed previously, require high-concentration tight-formation flying of large aircraft. Production pilots also fly in command of roughly 20% of Boeing's demonstration flights and many more as co-pilots.

33. Many of Boeing's ferry flights, including delivery of aircraft, are performed by production pilots. These flights impose a workload very similar to that of a normal commercial flight. It is not uncommon to have 10 to 15 passengers aboard a routine delivery flight. These people may include customers, employees, or guests of customers. "Engine out" ferry flights,

involving a transportation of planes with a disabled engine, are also done in large part by production pilots, together with pilots from the engineering group. These flights are performed under contract with customers. "Engine out" flights would never be conducted during normal revenue operations because of the drastically lower safety margin.

/s/
SAMUEL LEWIS WALLICK, JR.

SUBSCRIBED AND SWORN to before me this 25th day of November 1985.

/s/
NOTARY PUBLIC in and for the State of Washington, residing at Seattle

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
AT SEATTLE

EQUAL EMPLOYMENT OPPORTUNITY COMMISSION,	)	
Plaintiff,	)	NO. C84-187R
v.	)	AFFIDAVIT OF BRIEN S. WYGLE
THE BOEING COMPANY,	)	
Defendant.	)	

STATE OF WASHINGTON)
) ss.
COUNTY OF KING)

Brien S. Wygle, being first duly sworn upon oath, deposes and says:

1. I am currently employed by The Boeing Company as Vice President, Flight Operations. My responsibilities include overall supervision of all the Company's flight operations.

2. Boeing manufactures more commercial jet airplanes than any other company in the Western world. More than 220 airlines own and fly Boeing planes. These airlines include many foreign carriers, together with all major U.S. carriers.

3. Boeing spends billions of dollars in the research, development, testing, manufacturing and sale of its jets. These activities are supported by roughly 73,000 employees.

4. To maintain its success as an airplane manufacturer, it is imperative for Boeing to build excellent airplanes, with wide margins for safe operation and performance. Public and customer knowledge and perception of this quality of design, construction and safety is likewise crucial to Boeing's continued success.

5. Boeing conducts extensive flight operations in connection with its business. These operations average roughly 13,000 flight hours per year. The number of pilots on active flight status varies, but the current complement of 65 pilots is typical.

6. Boeing pilots are assigned to the Company's flight test organization, where they work primarily in three subgroupings: flight crew training, experimental, and production flight. The Director of Flight Test, S. L. Wallick, Jr., supervises these operations. Paul Bennett, the Company's Chief Training Pilot, supervises the flight crew training pilots and reports to Mr. Wallick.

/s/
Brien S. Wygle

SUBSCRIBED AND SWORN TO before me this 21st day of November 1985.

/s/
NOTARY PUBLIC in and for the State of Washington, residing at Mercer Island

Honorable Barbara J. Rothstein

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
AT SEATTLE

EQUAL EMPLOYMENT OPPORTUNITY COMMISSION,	)	
Plaintiff,	)	NO. C84-187R
v.	)	SUPPLEMENTAL AFFIDAVIT OF BRIEN S. WYGLE
THE BOEING COMPANY,	)	
Defendant.	)	

STATE OF WASHINGTON)
) ss.
COUNTY OF KING)

Brien S. Wygle, being first duly sworn, upon oath deposes and says:

1. I am currently employed by The Boeing Company as Vice President, Flight Operations. My responsibilities include overall supervision of all the Company's flight operations.

2. The products of the Boeing Commercial Airplane Company are aircraft designed and manufactured specifically to meet the needs of commercial air carriers. The success of these products is absolutely dependent upon a thorough familiarity with and understanding of the flight operations of commercial air carriers. I myself have piloted commercial revenue flights for Boeing customers in foreign countries and have done cockpit observation of flight operations of U.S. commercial carriers governed by Federal Air Regulations Part 121. Pilots under my supervision routinely observe and/or act as a pilot crew member on airline flights, both in the U.S. and abroad. Boeing's Director of Flight Test Lew Wallick has had such experience. Boeing's chief training pilot Paul Bennett has even more extensive experience flying for and observing

flight operations for both foreign and Part 121 commercial air carriers.

3. Boeing's flight crew training program is certified by the Federal Aviation Administration for training of Part 121 pilots. This certification necessarily contemplates that Boeing's training pilots thoroughly understand the duties and challenges faced by pilots engaged in flight operations controlled by Part 121.

4. Numerous commercial airlines, both foreign and domestic, have asked Boeing to "audit" their flight operations and make suggestions for improvement of these operations. Such audits include both observation and evaluation by Boeing pilots of commercial airline pilots in the performance of their jobs. These requests by commercial airlines obviously recognize the knowledge and expertise of Boeing with respect to

airline flight operations, including the responsibilities of airline pilots.

5. In support of Boeing's Motion for Summary Judgment, the Affidavit of Carol Knutson summarized Boeing's airplane insurance record log. I am advised that EEOC has suggested the summarized records may have included flights on which Boeing pilots were mere observers. This is not the case. Virtually all insurance logs in question reflect only flights of aircraft prior to customer delivery. Boeing pilots are in command of such flights. These insurance logs do not reflect any of the line flying activity performed by Boeing pilots after delivery of aircraft to a customer. Boeing pilots have also flown as pilots in command or first officer on numerous revenue flights of commercial airlines after delivery of aircraft to a customer. Such flights have carried

literally tens of thousands of passengers. However, the insurance summary provided in the Knutson affidavit did not include any passengers carried on customer's revenue flights.

/s/
BRIEN S. WYGLE

SUBSCRIBED AND SWORN to before me this 19th day of December, 1985.

/s/
NOTARY PUBLIC in and for the State of Washington, residing at Seattle

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
AT SEATTLE

EQUAL EMPLOYMENT OPPORTUNITY COMMISSION,	)	
Plaintiff,	)	NO. C84-187R
v.	)	AFFIDAVIT OF CAROL L. KNUTSON
THE BOEING COMPANY,	)	
Defendant.	)	

STATE OF WASHINGTON)
) ss.
COUNTY OF KING)

CAROL L. KNUTSON, being first duly sworn on oath, deposes and says:

1. I am currently employed by Boeing as Business Manager, Customer Training and Flight Operations Support.

2. I have prepared and directed the preparation of a summary from Boeing's airplane insurance record logs

reflecting passengers and crew aboard Boeing-insured flights from 1980 to 1985.

3. These records reflect that Boeing pilots carried over 160,000 passengers on more than 10,000 flights during this period. More than 600 of these flights involved carriage of 30 or more people aboard.

/s/
CAROL L. KNUTSON

SUBSCRIBED AND SWORN to before me this 21st day of November, 1985.

/s/
NOTARY PUBLIC in and for the State of Washington, residing at Mercer Island

APPENDIX D

DRAFT RELEASE NOS. 59-4, 59-5, 59-6,
24 FED. REG. 5247-50 (JUNE 27, 1959)

> For the present purposes, the process of aging can be considered as a progressive deterioration of certain important physiological and psychological functions. The process begins at some time after the attainment of maturity and continues unrelentingly until death. Many measurements have been made of the extent to which deterioration occurs with age in specific physiological and psychological functions. Studies have also been made to demonstrate the significance of these determinations in the performance of certain tasks. However, when knowledge developed by such observations and studies is applied to a specific occupation it suffers from lack of completeness, as is generally the case in considering human capabilities. Scientific advances are expected to add continually to this knowledge.

24 Fed. Reg. at 5247.

APPENDIX D

DRAFT RELEASE NOS. 59-4, 59-5, 59-6,
24 FED. REG. 5247-50 (JUNE 27, 1959)

Physical deterioration with age can, for the most part, be attributed to a progressive degenerative process termed arteriosclerosis, a condition affecting blood vessels in a manner quite comparable to the progressive accumulation of scale and rust in water pipes. The resultant interference with transportation of blood containing the vital materials needed by the tissues and organs, reduces the efficiency of function of bodily systems. This is an insidious process. There are no effective means of reversing it. It may affect the function of certain vital organs, such as the heart and brain, more rapidly than other organs and systems. The extent to which individual parts, or the body in general, are affected by these changes cannot be determined accurately by available methods of examination. Consequently, the point at which a function or a combination of functions first become critically affected cannot be determined in a given individual.

Specific medical conditions attributable to the degenerative processes of aging occur, of course, at an increasing rate as the processes continue. The death rate from heart disease, for example, has been found to be ten

> times greater for persons aged 45 to 64 than for those aged 25 to 44. By age 65, cardiovascular disease (including heart disease) causes more deaths than all other medical conditions combined. Nonfatal episodes occur at a comparably increased rate with age. Most of these medical conditions are those which produce sudden incapacity. They very frequently advance to the point where incapacity occurs without prior symptoms and in the presence of normal medical findings.

24 Fed. Reg. at 5247.

DRAFT RELEASE NOS. 59-4, 59-5, 59-6, 24 FED. REG. 5247-50 (JUNE 27, 1959)

> In general those human capabilities chiefly dependent upon experience, judgment and reasoning are retained for relatively long periods of time, and, in some respects, improve with age. These factors are operative at least from the attainment of maturity until some ill-defined state of deterioration is reached or until death, if this intervenes. In general, abilities to perform highly skilled tasks rapidly, to adapt to new and changing environmental situations, to resist fatigue, to maintain physical stamina, and to perform effectively in a complex and stressful environment begin to decline in early middle life and continue to decline at a fairly steady rate thereafter. In addition, although experience, judgment, and reasoning may be well preserved, the ability to apply them rapidly, especially in new, changing, and emergency situations, is progressively lost with age at a rate comparable to the loss of rapid performance of highly skilled tasks.

24 Fed. Reg. at 5247-48.

DRAFT RELEASE NOS. 59-4, 59-5, 59-6,
24 FED. REG. 5247-50 (JUNE 27, 1959)

> With regard to the age at which a pilot may serve in any pilot capacity in air carrier operations, on an aircraft powered by either turbine or reciprocating engines, it is reasonable under the present state of knowledge in order to assure the highest degree of safety required in air transportation to establish such maximum age at not more than 60.

24 Fed. Reg. at 5248.

FEDERAL REGISTER AMENDMENTS
(DECEMBER 5, 1959)

The draft release points out the reasons indicating that a hazard to safety is presented by utilization of pilots of these ages [over 60] in air carrier operations. These include the fact that there is a progressive deterioration of certain important psysiological [sic] and psychological functions with age, that significant medical defects attributable to the degenerative process occur at an increasing rate as age increases, and that sudden incapacity due to such medical defects becomes significantly more frequent in any group reaching age 60.

Such incapacity, due primarily to heart attacks and strokes, cannot be predicted accurately as to any specific individual on the basis of presently available scientific tests and criteria. On the contrary, the evidences of the aging process are so varied in different individuals that it is not possible to determine accurately with respect to any individual whether the presence or absence of any specific defect in itself either led to or precluded a sudden incapacitating attack. Any attempt to be selective in predicting which individuals are likely to suffer an incapacitating attack would be futile under the circumstances and would not be medically sound. Such a procedure, in light of the knowledge

that a substantial percentage of any group of persons will suffer from such attacks after reaching age 60, would therefore be ineffective in eliminating the hazards to safety involved.

This conclusion is emphasized by the fact that, in the case of one large group under medical supervision over an extended period, some 85% of the persons who had a heart attack for the first time had the attack within six months to a year after a thorough medical examination had found the individual in a condition normal to his age and without adding any evidence to suggest the imminence to such an attack. In addition, the general good health of an individual, or the appearance of good health, are not determinative as to whether he will suffer a heart attack from the conditions that are normal as a result of age.

24 Fed. Reg. at 9767.

FEDERAL REGISTER AMENDMENTS
(DECEMBER 5, 1959)

Other factors, even less susceptible to precise measurement as to their effect but which must be considered in connection with safety in flight, result simply from aging alone and are, with some variations, applicable to all individuals. These relate to loss of ability to perform highly skilled tasks rapidly, to resist fatigue, to maintain physical stamina, to perform effectively in a complex and stressful environment, to apply experience, judgment and reasoning rapidly in new, changing and emergency situations, and to learn new techniques, skills and procedures. The progressive loss of these abilities generally starts well prior to age 60; and, even though they may be significant in themselves prior to age 60, they assume greater significance at the older ages when coupled with the medical defects leading to increased risk of sudden incapacitation.

24 Fed. Reg. at 9767.

FEDERAL REGISTER AMENDMENTS
(DECEMBER 5, 1959)

The older pilots as a group fly the largest, highest performance aircraft, carrying the greatest number of passengers over the longest non-stop distances, operating into and out of the most congested airports near the largest cities, and travelling in flight in and through traffic lanes with the highest density of air traffic. A great many of these flights involve the newest, largest, fastest and most highly powered jet aircraft. The possible hazards inherent in the older pilot's medical condition are entirely too serious to determine the question of safety by an attempt to balance the increased chances of an incapacitating attack against the possibility that the pilot might not be engaged in the carriage of a large number of passengers at the time of such an attack.

In exploring all the ramifications of the problems involved, the nature of air traffic and air carrier operations in the future has been considered. Present indications are that the very large increases that have taken place in recent years are small in relation to the increases yet to occur. Projection of the number of pilots who will be in the 60 to 70 age group, in an era of extreme density and frequency of jet and piston air carrier operations

> involving many millions of passenger miles, indicates a probability of sudden incapacitation of some of these pilots in the course of flight. While medical science may at some future time develop accurate, validly selective tests which would safely allow selective pilots to fly in air carrier operations after age 60, safety cannot be compromised in the meantime for lack of such tests.

24 Fed. Reg. at 9767.

"DISPOSITION OF PETITION,"
FAA REGULATORY DOCKET
NO. 10358 (MAR. 23, 1972)

[T]here continues to be a sound medical basis for retaining the age 60 rule. When the rule was adopted, a chronological determinant was selected in the absence of our ability to determine the physiological and psychological age of individual pilots, and that ability remains lacking today.

"REPORT OF THE
NATIONAL INSTITUTE ON AGING PANEL
ON THE EXPERIENCED
PILOTS STUDY," AT 1 (AUG. 1981)

[The panel] finds, however, that age-related changes in health and performance influence adversely the ability of increasing numbers of individuals to perform as pilots with the highest level of safety and, consequently, endanger the safety of the aviation system as a whole. Moreover, the Panel could not identify the existence of a medical or performance appraisal system that can single out those pilots who would pose the greatest hazard because of early, or impending, deterioration in health or performance.

REF. NOTICE 82-10,
49 FED. REG. 14692, 14695
(APRIL 12, 1984)

There can be no real dispute that, with advancing age, the risks of suffering incapacitating medical events and of adverse psychological, emotional, and physical changes rise. Although risks of incapacitation are present in younger people, overall they are so low as to be acceptable. At some point in the aging process, the risk becomes unacceptably high. The NIA Panel attached no medical significance to age 60, or to any other specific age, as a mandatory retirement age. The Panel concluded that age-related health changes endanger aviation safety and further concluded that no medical or performance appraisal system can be identified that would single out pilots who would pose a hazard to safety. The Panel recommended retaining the age-60 rule. The FAA agrees. The conclusions reached by the NIA Panel and the supportive statements contained in the report point to a present inability to distinguish those pilots who, as a consequence of aging, present a threat to air safety from those who do not. Furthermore, public comments, especially those received from two experts from NASA and the Medical Director of a large aerospace firm, agree that there are currently no methods to obtain medical and performance data on older

pilots which would provide significantly meaningful data to consider relaxing the age-60 rule. The inability to detect or predict with precision an individual's risk of sudden or subtle incapacitation, in the face of known age-related risks, counsels against relaxation of the rule.

Accordingly, as recommended by the NIA Panel, the present age limit for air carrier pilots in command and seconds in command is being retained. While science and technology may at some future time develop accurate, validly selective tests which would allow a scientific study to be made to accurately determine whether the age 60 rule should be changed, safety cannot be compromised in the meantime for lack of such tests.

STATEMENTS BEFORE HOUSE
SELECT COMMITTEE ON AGING
ON AGE-60 RULE FOR PILOTS,

99th Cong., 1st Sess., Oct. 17, 1985
Comm. Pub. No. 99-533.

(TESTIMONY OF FAA
ASSOCIATE ADMINISTRATOR
ANTHONY BRODERICK)

> It is important to recognize . . . that the safety reasons for the [age 60] rule are severalfold: first, there is a deterioration of many functions with age; second, aging is accompanied by an increased frequency of sudden or insidious incapacitation or death from various disease processes; and, third, despite scientific advances that have occurred, there is still no way to predict, with reliable accuracy, the presence or onset of a number of medical problems in an individual aging pilot or to detect and measure all of the possible declining physical and mental functions.

STATEMENTS BEFORE HOUSE
SELECT COMMITTEE ON AGING
ON AGE-60 RULE FOR PILOTS,

99th Cong., 1st Sess., Oct. 17, 1985
Comm. Pub. No. 99-533.

(TESTIMONY OF FAA
ASSOCIATE ADMINISTRATOR
ANTHONY BRODERICK)

Those were the kinds of concerns which led to the rule, and they remain concerns today, despite advances in science and despite the frequency or types of medical examinations which may be conducted. Clearly, there has been no change in the age-related nature of these declining skills since the rule was promulgated.

. . . .

While we continue to monitor scientific and medical advancements with a view both toward improving our overall medical evaluations of airline pilots and toward modifying the Age 60 Rule when that proves feasible, it is the FAA's view that current knowledge still does not permit us to identify those pilots who can safely perform operations under Part 121 past age 60.

APPENDIX E

Exemption No. 4848

UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
WASHINGTON, D.C. 20591

In the matter of the petition of MELVIN M. AMAN, et al., for an exemption from § 121.383(c) of the Federal Aviation Regulations	Regulatory Docket No. 25008

DENIAL OF EXEMPTION

By letter dated May 1986 and supplements dated August 1986 and October 1986, Mr. Raymond C. Fay, Haley, Bader & Potts, 2000 M Street, N.W., Suite 600, Washington, D.C. 20036, petitioned on behalf of Melvin M. Aman and 38 other current and former airline pilots for an

exemption from § 121.383(c) of the Federal Aviation Regulations (FAR), commonly referred to as the Age 60 rule, to permit Mr. Aman and each of the 38 other current and former pilots (petitioners) to continue to serve as a pilot in Part 121 air carrier operations after reaching their 60th birthday.

Subsequent to the submission of the petition, four of the petitioners have requested that their names be withdrawn. Those four petitioners are Charles Raphael, Ralph Mischker, Charles Davenport, and James Donegan.

Section of the FAR affected:

> Section 121.383(c) states, in pertinent part, that no certificate holder may use any person, nor may any person serve, as a pilot in operations under Part 121 of the FAR if that person has reached his 60th birthday.

The petitioners' supportive information is as follows:

Petitioners state that in 1985, an Age 60 Exemption Panel (the panel) was assembled to evaluate the medical and neuropsychological status of air carrier pilots seeking to continue to serve as pilots in Part 121 air carrier operations after reaching 60 years of age. The panel is comprised of experts in the fields of cardiology, aerospace medicine, and neuropsychology. The panel developed and approved a medical/neuropsychological protocol (exemption protocol) for use in evaluating the fitness of applicants for exemption from the Age 60 rule. The exemption protocol consists of the following battery of medical/neuropsychological tests and procedures:

1. Medical History

2. Physical Examination

3. Blood Pressure (resting)

4. Chem-Screen Profile, SMAC-24, or comparable Blood Chemistry Tests (including Blood Lipid Tests)

5. Hemoccult

6. Urinalysis

7. Chest X-Ray

8. Audiometry

9. Vision Tests (distant and near)

10. Tonometry

11. Resting Electrocardiogram

12. Exercise Screen Test (Bruce or Balke Protocol)

13. Wechsler Adult Intelligence Scale (WAIS-R)

14. Trailmaking Test

15. Wechsler Memory Scale

16. Stroop Color Word Test

17. Perceptual Speed Cancellation Test

The panel asserts that the ability to make individual assessments of pilots' physiological/psychological status exists in the scientific community, that the methods available for those determinations are well known to the Federal Aviation Administration (FAA), and that the methods have been routinely used by the FAA in the evaluation, recertification, and monitoring of pilots. The panel believes that the exemption protocol utilized here, together with additional testing as required on an individual basis, is sufficient to evaluate the fitness of any pilot who has reached his 60th birthday from a medical/neuropsychological standpoint.

Each of the 39 petitioners was examined and tested using the

exemption protocol. Results were then evaluated by the panel members in conference, and petitioners were approved or deffered for repeat or supplemental testing. Some of the petitioners required additional tests of the cardiovascular system, including thallium stress testing and gated blood pool scans. Other received additional neuropsychological tests to further evaluate their status. The data, including any followup reports of additional tests and procedures, plus summaries of the examining physicians, are included in the petition. Each of the 39 petitioners has been recommended by the panel for exemption from the Age 60 rule.

Petitioners state that the FAA has recognized and moved forward to apply in practice the near revolution in modern medical evaluation, monitoring, and treatment in recent years. Petitioners cite the history and examples of the FAA's application of modern medical knowledge for the discretionary issuance of medical certificates under Part 67 of the FAR to applicants who do not meet the eligibility requirements for the normal issuance of the appropriate (first-, second-, or third-class) medical certificates. Further, petitioners state that the FAA's experience with thousands of private, corporate, commuter, air taxi, and FAA pilots over 60

years of age, as well as the more than 500 flight engineers over 60 years of age currently serving in air carrier operations, is compelling evidence that the FAA has the means to grant exemptions from the Age 60 rule.

Petitioners state that FAA's inflexible adherence to the Age 60 rule is based largely on its oft-repeated statement that medical science is currently unable to reliably and accurately predict the future health status of a pilot who has reached his 60th birthday and wishes to continue to serve as a pilot in Part 121 air carrier operations. Petitioners state that any requirement that a petitioner (for exemption from the Age 60 rule) be able to predict with absolute certainty his future health status imposes a standard which exceeds that which is used by the FAA for the special issuance of medical certificates.

The petitioners state that the tolerance of increased, but acceptable, risks has been demonstrated by the FAA in recent years in the great number of special issuances of medical certificates to pilots (under age 60) with various medical problems, e.g., alcoholism, myocardial infarction, bypass surgery, monocular vision, personality disorders, strokes, and disrhythmias. The acceptance of greater risk in these special issuances

to pilots under age 60 with known pathology (in some instances progressive pathology) is squarely at odds with the FAA's refusal to issue exemptions to the Age 60 rule.

Petitioners state that the Age 60 rule was adopted based on medical evidence available in 1959. Since that time, there have been significant improvements in health, health awareness, longevity, vigor with advancing age, medical diagnosis, early detection of disease, and prediction of future health status. These improvements, when combined with advancements in aircraft, simulator technology, and crew coordination and incapacitation training, all make it clear that whatever rationale may have existed for an Age 60 rule in 1959 no longer exists in 1986. Petitioners cite excerpts from various letters, reports, publications, etc., to illustrate the history associated with the aging process, changes in lifestyles, and the medical and health progress made since 1959.

Petitioners address, and include as an exhibit, an examination protocol proposed by Drs. Williams, Koonce, and Fox. This examination protocol was developed following a request by the House Select Committee on Aging during a hearing conducted on

October 17, 1985, concerning airline pilot retirement. The purpose of the examination protocol was to provide a substitute for the FAA's Age 60 rule in order that any pilot affected by the present Age 60 rule, who wished to continue as a pilot beyond age 59, could elect to undergo a comprehensive examination of health status and performance ability which would establish his continued qualification. Additionally, it was proposed that the examination protocol could provide the additional benefit of creating data that could subsequently be used as a basis for further modification of rules regarding such pilots. This examination protocol is not the same as the exemption protocol which was developed by the panel. The Williams, Koonce, Fox examination protocol consists of the following battery of medical evaluations:

1. Medical and interim history including smoking history

2. Physical examination including funduscopic

3. Blood pressure

4. Chemical screen profile (SMAC-24 or comparable blood chemistry test including total and high-density lipoprotein, cholesterol, and triglycerides)

5. Urinalysis

6. Chest X-ray

7. Resting electrocardiogram (standard 12-lead)

8. Exercise Tolerance Test (ETT) including thallium perfusion study

In addition, this examination protocol includes comprehensive flight proficiency requirements which are to be completed as part of a pilot's (age 60 or more) training and proficiency check after being medically reinstated. The flight proficiency requirements are summarized as follows:

1. Written test of knowledge of specific aircraft systems and applicable information from the FAR and Airman's Information Manual.

2. Perceptual-motor skills of pilots using computer-based flight simulator with hard-copy readout of pilot's performance. Pilot to perform maneuvers specified by the FAA in Appendix F of Part 121 within the limitations specified in Advisory Circular 61-77.

3. Application of rules and procedures set forth in various aircraft manuals programmed into the computer-based simulator to check for appropriateness of response by the pilot.

Petitioners state that the FAA has long recognized and approved the use of simulators in training, checking, and certification of flight crewmembers. Petitioners cite the increased use of line-oriented flight training (LOFT), which involves the training and checking of an entire flightcrew simultaneously and more closely simulates the real flight deck environment.

Petitioners cite a United Air Lines, Inc. (UAL) petition for exemption (Docket No. 21991) to eliminate training in actual aircraft for flight engineer trainees. In its petition, UAL stated that the use of advanced simulators has promoted safety "because emergencies too dangerous to simulate in an aircraft may easily be taught in a simulator with no risk, thereby training crewmembers to a higher level of proficiency."

Petitioners argue that because accurate and objective means exist to evaluate performance at all ages, there is no need for a protocol devoted exclusively to a determination of the effects of aging on performance. Nor is

there a need to modify existing simulator facilities to provide quantitative data, though such data could easily be acquired if necessary.

Petitioners state that since 1959, the aging of the pilot population has been accompanied by a progressive improvement in the safety record of air carriers operating under Part 121 of the FAR. Petitioners cite, as an example, the median age of UAL flight crewmembers which increased from 36 years in 1968 to 46 years in 1981. In contrast, UAL's safety record reflects that increasing flight crewmember age is not associated with increased accident frequency. The petition includes an exhibit which provides dates, location, and age of flight crewmembers (by position) involved in eight major accidents (airframe loss) experienced by UAL during the years 1965 to 1979. Petitioners assert that, because the youngest pilots have the highest accident rates, the replacement of healthy, experienced pilots at age 60 with younger, less experienced pilots may have an adverse effect on safety.

The petition includes exhibits which show that incapacitations have occurred in all age groups and that even myocardial infarctions, commonly believed to be associated with age, occur among flight crewmembers from 39 to 57

years of age. An additional exhibit contains a reflection of the remote possibility of incapacitation. Petitioners state that no incapacitation has ever resulted in an accident in scheduled domestic air carrier operations. Petitioners state that, in light of current evidence, a trend exists toward a critical reassessment of the Age 60 rule. They cite several sources which support exemptions from the Age 60 rule and trace the history of FAA's alleged total disregard for advances which have paved the way for relief from the rule. Petitioners argue that the FAA's intransigence has run so deep that its position up to this point is arbitrary and capricious and an abuse of discretion.

Petitioners submit that there have been sufficient changes in factual and legal circumstances such that it would be an abuse of discretion for the FAA not to apply the principles of the Age Discrimination in Employment Act of 1967 (ADEA), in granting the petitions for exemption. Petitioners state that the FAA should embrace the ADEA's principles of nondiscrimination on the basis of age and of promoting employment of older persons based on ability rather than deterring such employment. With respect to exemptions, which by their nature require individualized scrutiny, petitioners state that FAA should confine its inquiry to the same

individualized considerations used in determining whether age is a bona fide occupational qualification (BFOQ) under the ADEA.

Petitioners assert that it is no response for the FAA to eschew the ADEA's structure and purpose on the basis that the FAA does not employ the petitioners and, therefore, is not subject to the ADEA. The ADEA is binding upon the FAA as an employer. However, FAA pilots, who at times operate the same types of aircraft as the petitioners operate, are not subject to any chronological age limit and fly beyond age 60. Petitioners state that hundreds of professional pilots beyond age 60 operate the same aircraft types that the petitioners operate and in similar operations. Petitioners further state that this is virtually conclusive evidence that the aspects of the BFOQ test are not a hurdle to granting exemptions from the Age 60 rule.

Petitioners state that the FAA may no longer skirt a particularized assessment of Age 60 rule exemption applications by arguing that the Age 60 rule itself is a BFOQ. Petitioners further state that the Age 60 rule has never been determined or proven to be a BFOQ, despite dictum to the contrary in Starr v. FAA, 589 F2.d 307, at 313 (7th Cir. 1978). Instead, petitioners argue that the FAA should follow the BFOQ

standard and that, if any person can show that individual testing is feasible to establish job qualifications beyond age 60, an exemption should be granted.

Petitioners state that the FAA must take a fresh look at its previous policy of denying any exemption to the Age 60 rule. Recent widespread application of advances in medicine by the medical community and the FAA, by its special issuance of medical certificates, requires that the FAA reexamine its exemption denial policy on the Age 60 rule. Petitioners state that the FAA's exemption process is designed to mirror the safety standards in the rule. Petitioners cite an excerpt from the legislative history of the Federal Aviation Act of 1958 (the Act), in addition to certain excerpts from several court cases, to show that the FAA has the authority and obligation to provide regulatory relief by exemption in the public interest. Petitioners request that the FAA consider and grant the requested exemptions as soon as practicable and, with respect to those petitioners who are not yet 60 years of age, make the effective date of the grant of exemption well in advance of their 60th birthdays so that adequate arrangements can be made with their air carrier employers to permit them to continue to serve as pilots without any interruption of employment.

A summary of the petition was published in the Federal Register on July 24, 1986 (51 FR 26622), and the comment period closed on August 13, 1986. By request of the Aircraft Owners and Pilots Association, the comment period was reopened for an additional 30 days on September 29, 1986 (51 FR 34520). During the extended comment period, over 100 comments were received.

Numerous individual pilots either over age 60 or close to it commented in favor of the petition. Several individuals, including airline pilots, indicated that the petition should be denied in the interest of safety. Comments were received from physicians; some indicated they were in favor of the petition and others urged its denial.

The United States Equal Employment Opportunity Commission commented that this petition for exemption offered the opportunity for a controlled study similar to the one recommended by the National Institute on Aging in 1981, using the petitioners as

participants and their test results as baseline data. The American Association of Retired Persons urged a grant of this petition and suggested that the FAA determine fitness and competency of pilots on an individual basis, stating that aging is a "uniquely individual phenomenon. . . . The physiological changes accompanying aging affect different individuals in different ways and at varying times in their lives."

The Aircraft Owners and Pilots Association commented in support of the petitioners, remarking that "an experienced pilot who remains medically qualified and meets recurrent training requirements should be allowed to continue flying until becoming incapable of meeting a set of objective, reasonable, and measurable standards." The Experimental Aircraft Association stated that the petition was in the best interests of all airline pilots and general aviation pilots.

The Air Transport Association of America (ATA) commented opposing a grant of the petition because it is unsupported by an adequate factual basis and because granting exemptions to the Age 60 rule is procedurally improper. ATA stated that its member airlines are in the business of avoiding and managing risks, and strongly disagreed with the petitioners'

statement that "An increasing number of airlines support elimination or modification of the Age 60 rule, based on their experience." Further, ATA stated that accepting the opinion of the "exemption panel" would be accepting the value judgments and subjectivity of these examiners who are not in the business of making operational airline decisions or managing the risks involved in the safe transportation of passengers. The ATA indicated that, in its opinion, granting an exemption from this rule would represent abrogation of a long-established and uniformly-applied rule, which has been upheld repeatedly. ATA suggested that this petition was actually a request for rescission of the Age 60 rule based on the opinion of "experts" that it is safe to do so, raising an issue more properly addressed by rulemaking.

In a separate comment on behalf of the ATA's Medical Panel, Lawrence Marinelli, MD, commented that he is not convinced that the protocol presented by the petitioners is a predictive test for debilitation due to aging, nor that the airline cockpit is an appropriate place to gather data to validate this protocol. He recommended denial of the petition since, in his opinion, an equivalent level of safety could not be guaranteed to the public by granting such an exemption. He recommended that the issue of

the protocol be the subject of independent scrutiny by aviation medical experts.

The Air Line Pilots Association (ALPA) commented strongly opposing the petition and urging its denial. ALPA's reasons for this position are the perception by its members of the deterioration of pilots' skills during the latter part of their careers, documented medical deterioration with age among airline pilots, economic considerations for pilots predicated upon retirement at age 60, and the lack of testing and independent evaluation of the petitioners' protocol establishing its reliability, specificity, sensitivity, and ability to disqualify. ALPA further argues that simulator testing does not adequately determine a pilot's capability to continue flying past his normal retirement age since a simulator is a training tool and does not exactly replicate the aircraft it models. ALPA also raised the question of legal liability of the private exemption panel for the results of an accident if a relationship between its decision and the accident cause was demonstrated should an exempted pilot be involved in a fatal aircraft accident.

The FAA's analysis/summary is as follows:

Section 601(a)(5) of the Act states that the Administrator is empowered to promote safety of flight of civil aircraft in air commerce by prescribing and revising from time to time reasonable rules and regulations (minimum standards) governing, in the interest of safety, the maximum hours or periods of service of airmen and other employees of air carriers.

Section 601(b) of the Act requires that, in prescribing standards and regulations and in issuing certificates under Title VI of the Act, the Administrator shall give full consideration to the duty resting upon air carriers to perform their services with the highest possible degree of safety in the public interest.

Section 601(c) of the Act states that the Administrator from time to time may grant exemptions from the requirements of any regulation prescribed under Title VI - Safety Regulation of Civil Aeronautics if he finds that such action would be in the public interest.

Section 107 of the Act, added by the Airline Deregulation Act of 1978 (ADA), clearly states the Congressional intent that the implementation of the ADA result in no diminution of the high standards of safety in air transportation attained in the United

States at the time of enactment of the ADA.

The Age 60 rule (issued December 1, 1959; effective March 15, 1960) was adopted by the Administrator in recognition of his responsibility to regulate air commerce in such a manner as to best promote public safety. The Age 60 standard is based on the potential risk to safety presented by the use of pilots, aged 60 or more, in Part 121 air carrier operations. Among the reasons for adopting the Age 60 rule are certain factors, in addition to sudden or subtle incapacitation, which, with some variations, are applicable to all aging individuals and are not susceptible to precise measurement. Some of the safety factors relate to loss of ability to perform highly skilled tasks rapidly, to resist fatigue, to maintain physical stamina, to perform effectively in a complex and stressful environment, to apply experience, judgment and reasoning rapidly in new, changing, and emergency situations, and to learn new techniques, skills, and procedures.

The Age 60 rule, because of its controversial nature, has been subjected to frequent judicial scrutiny throughout its history. As early as 1960, the basic rule was challenged in litigation. It has been the subject of numerous suits since that time, many of

which have focused on the agency's policy of not granting exemptions to the rule. In each instance the rule, its legality or the FAA's refusal to grant exemptions to the rule have been upheld by the courts. A reexamination of these many cases, including those cited by the petitioners, would serve little purpose.

Congress carefully examined the basis for the rule in 1979 and, because of its concern that safety could be compromised by amending the rule, left the rule unchanged, calling instead for a study to be conducted by the National Institute on Aging to determine whether there was a continued need for the rule.

The National Institute on Aging, pursuant to its extensive analysis, found no feasible safety alternatives to the rule. The panel which conducted the review, while indicating that it did not attach a medical significance to age 60 as a mandatory retirement age for pilots, nevertheless found that age-related changes in health and performance influence adversely the capability of increasing numbers of individuals to perform as pilots with the highest level of safety and, consequently, endanger the safety of the aviation system as a whole. Moreover, the panel could not identify the existence of a medical or performance appraisal

system that can single out those pilots who would pose the greatest hazard because of early, or impending, deterioration in health or performance.

The 39 petitioners may be divided into two groups, those to whom the Age 60 rule applies since they have reached their 60th birthday, and those to whom the Age 60 rule does not apply since they are not yet 60 years old. The FAA does not consider an application for exemption by persons to whom a rule does not apply, i.e. persons in the second group. It would be illogical to say, if the exemption were granted, that a person who has not yet reached age 60 may be exempted from that regulation at the time he or she reaches 60. Many circumstances could intervene. Therefore, the FAA has deleted from consideration in this petition the following persons who have not yet reached age 60: Robert S. Bos, Charles H. Deming, Cecil E. Judd, Richard P. Munger, and Charles S. Pease.

A good deal of the factual material and argument presented by the petitioners would seem to be aimed at the continuing validity of the Age 60 rule itself, rather than the merits of petitioners' exemption request. Since the petitioners have chosen to request exemptions from the rule, rather than a change in the rule itself, this material does not

directly address the key issues presented by this petition.

They are whether the remaining petitioners have met the requirements set forth in Part 11 of the FAR, specifically § 11.25. That is, the petitioners must provide information, views, or arguments to support the request and show why the request would be in the public interest and the reasons why the exemption would not adversely affect safety or the action to be taken to provide a level of safety equal to that provided by the rule from which the exemption is sought.

The petitioners have failed to show that what they request is in the public interest. The FAA does not agree that it is in the public interest to suppose an increase in safety will result from the use of their services as pilots beyond age 60, thereby outweighing the potential safety hazard to the public from increased risk of incapacitation and diminished performance.

Petitioners argue that the loss of experienced pilots to the airlines because of retirements mandated by the Age 60 rule is resulting in a shortage of pilots which is forcing the airlines to lower their standards and to hire less experienced and qualified pilots. Thus, petitioners argue that granting exemptions to the Age 60 rule would ease this

shortage and increase the level of safety. However, the exhibits presented by petitioners in support of this argument make it clear that current lowering of minimum experience requirements at some airlines is the result of a number of factors; including fewer civilian pilot trainees, fewer pilots leaving the military, increasing numbers of senior pilots retiring voluntarily before age 60, and the expansion of the airlines after deregulation.

The petitioners have not shown why this regulation should not apply to them specifically, and how they are different from the class of persons being regulated such that the rule should not be applied to them. The testing protocol, which the petitioners cite, is designed to show that the petitioners are different from others in the general class of 60 year old pilots regulated under FAR 121.383(c). The petitioners agree that some pilots over age 60 have increased risk of health problems. However, by their testing protocol, they have attempted to establish that they are different from the other age 60 pilots. What they have in fact shown is that most are healthy pilots who met the FAA minimum standards for Class I medical certificates at the time of the testing under the protocol.

The petitioners have been endorsed by a panel, whom they have selected, as being fit from a medical/psychological standpoint, even though they are age 60. One of the petitioners, however, manifested significant coronary heart disease and had undergone invasive treatment prior to evaluation by the panel. Though mentioned within the text of some medical documents submitted as part of an appendix to the petition, this disqualifying diagnosis appears to have been ignored or overlooked by the panel when it formulated its recommendations and endorsements. Indeed, that petitioner did not himself fully note his hospitalization and treatment on one of the medical history forms included in the pertinent appendix. In consideration that these petitioners are offered, in a "test case," as examples of healthy, aging pilots selected as worthy of exemption from the generally applicable rule, this apparent failure of the proposed selection methodology is particularly noteworthy. The petitioners have not shown their difference from other certificated pilots aged 60, except for their having been evaluated using the proposed protocol.

The petitioners have failed to show that use of their protocol establishes an equivalent level of safety to that provided by § 121.383(c). They have not

shown that use of their protocol will not adversely affect safety.

In spite of the advances that have been made in medical diagnosis, treatment, and in primary prevention techniques, some of which are cited by the petitioners, it is still true that death and disability from degenerative disease processes increase with increasing chronological age. This is true of airline pilots, as it is for all other population groups. The large number of coronary bypass operations being performed and the large number of applications for medical certificates from persons with coronary heart disease indicate that, although the incidence of the disease may be decreasing, it is still very substantial.

It is also known that at least some of the mental, psychomotor, emotional, intellectual, and physical attributes necessary for flightcrew performance deteriorate with advancing age. Such deterioration is often subtle rather than grossly evident and affects the highest intellectual and motor skills. Regardless of individual exceptions that may be cited, all available data indicate that the population as a whole is subject to both phenomena: an increasing rate of disability or death due to physical changes or disorders and deterioration in skilled performance

with increasing age. The petitioners have not established how their protocol discriminates for subtle deterioration.

Additionally, population variability with respect to disability, death, and deterioration in performance increases with increasing age. This means that predictive indices suffer from a progressive decrease in discriminatory power with advancing age. While our medical diagnostic and performance assessments skills have improved in the past 25 years, diagnostic tests that could be used for screening of airline pilots have not improved to the point where they can be depended upon to detect reliably either the person who will manifest such a deterioration during the several months following examination nor the person who may be unable to perform his crew duties safely, particularly in a novel or critical situation. Petitioners offer no evidence that their protocol can discriminate such pilots validly and reliably and, indeed, within 7 months of his evaluation and endorsement by the panel, one of the petitioners had manifested significant valvular heart disease with a major cardiac arrhythmia which no longer permitted airman medical certification.

Although the incidence of age-related death and disability begins to rise prior to age 60,

this choice has been sufficiently conservative to ensure a high degree of safety while allowing experienced pilots to fly as long as reasonably possible.

Until such time as persuasive evidence that validates predictive tests feasible for application to this population is available, the current rule must be applied without exemption. Because the likelihood of sudden death, disability, or incapacitation due to previously undetected disease increases at an accelerating rate with each additional year of chronological age, granting exemptions would compromise, by some amount, the current level of safety. Additionally, the magnitude of the risk increases with each additional year beyond age 60 that pilots are allowed to remain in the cockpit. This does not mean, as the petitioners assert, that the FAA now insists, or will ever insist, that a pilot be able to predict with complete accuracy the future state of his health.

No evidence for the predictive value of the protocol is offered by the petitioners; statistics on its validity and reliability as a predictive measure have not been offered for FAA evaluation. The ability of medical examiners to use the protocol to determine which pilots may be allowed to continue to perform the duties of an air carrier pilot in command

versus those who may not has not been determined scientifically.

The tests which the petitioners have proferred are not new or advanced. They have been in use for many years as tools for assessment of current condition. The argument for their use in this protocol hinges upon the scientifically unsupported opinion of a panel of physicians and a psychologist convened for this specific purpose by agents for the petitioners.

Indeed, the petition describes another proposed examination protocol developed by Drs. T. Franklin Williams, Samuel M. Fox III, and Jefferson M. Koonce (see page 161a). That this protocol differs from the one proposed by the petitioners suggests, and we believe, that the medical community at large does not agree on any protocol. This further supports our position that in fact, what the petitioners profess their protocol does, cannot yet be done.

With regard to the utilization of computer-based flight simulator systems to determine an airman's skill level and assess pilot performance, we are unaware of any evidence that such systems are validly applicable to the measurement of performance functions that may deteriorate in relationship to aging. The petitioners do not provide any evidence that use of such systems is validly

applicable to measurement of psychomotor and psychophysiological function, nor do they provide criteria that could be used in determining when an individual should no longer be permitted to pilot an aircraft in air carrier operations.

In response to a request by Congressman Matthew J. Rinaldo, for testimony with respect to the Age 60 rule, Dr. Don E. Flinn, Chairman of the Department of Psychiatry of the Texas Tech Health Sciences Center School of Medicine prepared the following statement on November 12, 1985 (excerpted):

> " . . . it is possible to measure a wide variety of individual perceptual, intellectual, psychomotor and psychophysiological functions. However, the relationship of these discrete functions to complex tasks such as decision making and performance in piloting a commercial aircraft has not been validated. Complex performance depends on the interrelationship of all of these functions. No formula presently exists for combining these individual functions into a 'physiological index' of aging. . . . It has been proposed that age related decrements in pilot performance can be detected

through the use of flight simulators. However, it is my experience that pilots seen for psychiatric and psychological evaluation may have clinically significant decrements in intellectual function and psychomotor performance which have not been detected by routine flight simulator checks conducted by the airlines. This experience is also compatible with that of the FAA-Airline-ALPA program for dealing with impaired pilots, referred to in the Institute of Medicine Report, which states that detailed histories of such pilots resulted in the retrospective identification of proficiency problems in about 30% of the total number of cases, although proficiency may not have deteriorated to the point of being identified by flight training personnel. In summary, I believe that a uniform age at which all air line pilots should retire is necessary, since no age related 'psychophysiological index' of intellectual and psychomotor functions exists at present. . . . "

In response to a similar request, Dr. Charles E. Billings, Senior Scientist of the Aerospace Human Factors Research Division, NASA-

Ames Research Center responded (excerpted):

> " . . . no evidence that objective, reliable tests of cognitive function in a rich and rapidly changing environment exist, let alone that they have been applied to or validated in a pilot population of any age. In view of the fact that the vast majority of our air transport accidents are caused by failures of judgement and decision-making, I believe that the age 60 rule cannot be safely eliminated until such tests have been developed, the results published in the open literature, and used in the field for long enough to demonstrate their effectiveness as predictive indices of pilot cognitive and decision-making performance."

In response to an inquiry from the House Select Committee on Aging, William Acker, PhD, Senior Psychologist, RHR, Inc., London, stated (excerpted):

> " . . . testing and especially monitoring intellectual status is not as straightforward as it might be. Some neuropsychological tests have to be novel for them to be able to discriminate subtle deficits

> rather than gross impairments. If they are not novel only the most serious and persistent deficits will be detected. The subtle deterioration which surely must be the target in over 60 pilot screening is very likely to go undetected in repeated screenings."

The FAA is charged with creating qualification standards for airline pilots in Part 121 revenue operations. Among these standards, in order to perform as a pilot, a person must satisfy Class I medical standards and must not have reached his 60th birthday. These and other qualification criteria ensure high safety standards for Part 121 air transportation.

The Age 60 rule is not a retirement rule as the petitioners have stated; it simply mandates that an airline may not use a person in revenue operations as an air carrier pilot under Part 121 of the FAR after that person has reached age 60. An airline pilot may continue to work for an airline in other capacities without regard to age. Many Part 121 air carrier pilots are eligible to serve as flight instructors, check airmen, or flight engineers after their 60th birthday. In fact, of the petitioners who are over age 60, all but one were employed by airlines, at the time of the petition.

The fact that the agency has clearly stated its position in the past with respect to exemptions to this FAR does not constitute a prejudgment of this petition. Numerous prior petitions for exemption from this regulation have prompted FAA policy statements, which are from time to time restated by the Administrator and other FAA officials. The agency's position has been and remains that when exemptions from this rule can be granted, rulemaking will be initiated to make available the new technology/procedures to all pilots affected by this rule.

Petitioners also assert that the FAA has historically acted in bad faith in adopting the rule in the first instance, in retaining the rule, and in refusing to grant exemptions.

The evidence and argument in support of this position consist largely of supposition and speculation. In short, this assertion is completely without merit.

The Age 60 rule, § 121.383(c), is an FAA operational safety standard rule. The rationale for its promulgation is a high degree of safety for air transportation in the public interest. It was prompted by the recognition that certain physiological and psychological functions deteriorate with age, that significant deficits attributable to this degenerative process occur at an increasing rate as age

increases, and that it is impossible to adequately predict when operationally significant deterioration or an incapacitating event might occur with respect to aging individuals. No test that the FAA is aware of will predict the extent or the rate of this deterioration due to age. In applying the rule to Part 121 air carrier pilots, it was noted at the time the rule was issued that the number of active air carrier pilots age 60 or over had been increasing and that pilots in this age group were being employed to carry a substantial number of passengers.

The FAA has determined that it is not possible to ascertain an equivalent level of safety from the petitioners' testing procedure. There is simply not enough known about deterioration due to aging, and adequate methods have not been developed and validated. The FAA cannot determine safety will not be adversely affected by exempting certain pilots based on the protocol offered by the petitioners. Public safety dictates that we have a method of known reliability and validity which is more widely accepted than the one presented. The FAA has previously concluded, in withdrawing an advance notice of proposed rulemaking, Notice No. 82-10, (47 FR 29782, July 8, 1982), that accurate, validly-selective tests, which would scientifically support determining who can safely serve as pilots after

reaching age 60, are not available. Accordingly, since uncertainty exists, the petitioners have failed to show an equivalent level of safety to that provided by § 121.383(c).

The FAA's foremost duty, as mandated by Congress in the Act, is to promote safety of flight of civil aircraft in air commerce. Indeed, in Section 601 of the Act, Congress instructed the Administrator to prescribe reasonable rules and regulations governing, in the interests of safety, the maximum periods of service of airmen employed by air carriers and to "give full consideration to the duty resting upon air carriers to perform their services with the highest possible degree of safety in the public interest. . . . " The FAA has determined that the bases for the Age 60 rule outweigh any possible adverse social effects from the rule.

As a group, and as supported by certain exhibits included in the petition, older pilots operate the largest, high-performance aircraft, carrying the greatest number of passengers over the longest nonstop distances, operating into and out of the most congested airports near the largest cities with high-density population and in high-density air traffic areas. These safety concerns are more prominent today than they were in 1959 based on: (1) the increased aircraft size, operating weights, and

passenger-seating capacities (e.g., the Boeing 707 with 179 passengers versus the Boeing 747 with 550 passengers), and (2) the doubling and, in many cases, tripling of total annual aircraft operations at most major and medium hub airports (e.g., Atlanta increased from 222,809 operations in 1959 to 666,100 in 1984 and 800,000 operations (forecast) by the turn of the century). Thus, the stress, demands, and responsibility placed on the older pilots today are much greater than those in 1959.

As economic deregulation increases competitiveness, among Part 121 air carriers, more productivity is being required of each employee. On the other hand, Section 107 of the Act requires that economic deregulation result in no diminution of the high standards of safety in air transportation attained in the United States at the time of enactment of the ADA in 1978. Thus, the increased stress and productivity demands faced by the older pilots and the Congressional mandate expressed in Sections 107 and 601(a) and (b) of the Act justify a denial of exemption because a relaxation of the § 121.383(c) minimum safety standard would neither ensure a high degree of safety in air transportation nor be in the public interest. The public is the more than one million air passengers who <u>daily</u> expect a high level of safety. The desire of the applicants to continue to serve as pilots after reaching 60 years of

age does not transcend the public right to this high degree of safety.

In consideration of the foregoing, I find that a grant of exemption is not in the public interest. Therefore, pursuant to the authority contained in Sections 313(a) and 601(c) of the Federal Aviation Act of 1958, delegated to me by the Administrator (14 CFR 11.53), the petition of Mr. Raymond C. Fay, Haley, Bader & Potts, on behalf of Melvin M. Aman and 38 other current and former pilots, for an exemption from § 121.383(c) of the Federal Aviation Regulations is denied.

/s/
William T. Brennan
Acting Director of
Flight Standards

Issued in Washington, D.C., on September 8, 1987.